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NATO and Warsaw Pact Weapons Production Trends 1975-1989

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NATO AND WARSAW PACT
WEAPONS PRODUCTION TRENDS
1975-1989

October 1990

This report reflects NATO and Warsaw Pact weapons production during the period 1975 through 1989.

This report was prepared by Defense Analysis and Management Information System (DAMIS), Office of the Assistant Secretary of Defense for Program Analysis and Evaluation.

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Executive Summary

EXECUTIVE SUMMARY

Purpose.

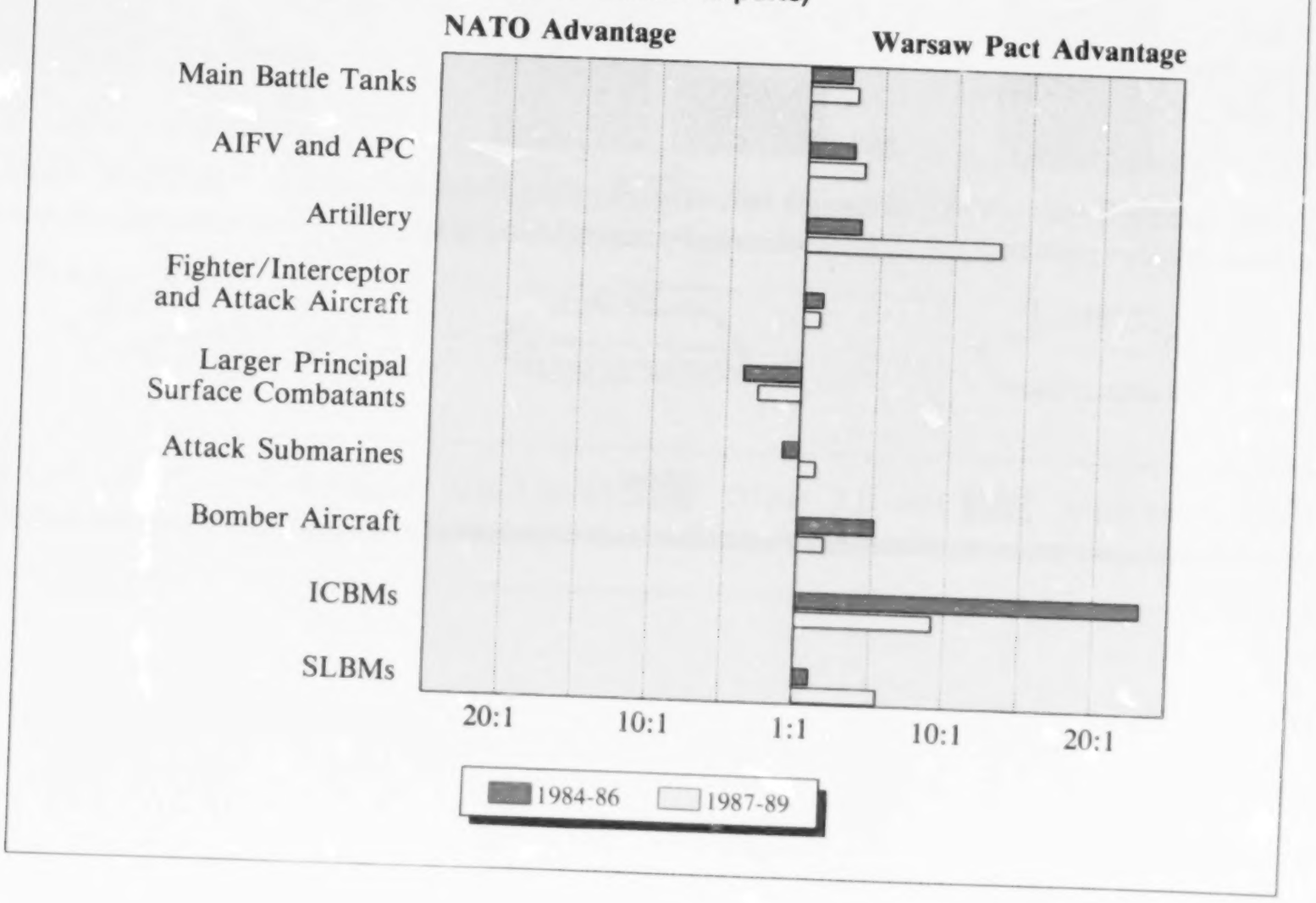
The purpose of this report is to provide a comprehensive source of NATO and Warsaw Pact weapons production historical trends for the period 1975 through 1989.

The data contained in this report reflect the production quantities for each of the 23 NATO and Warsaw Pact nations by year in 34 categories. The data are current as of May 1990.

NATO-Warsaw Pact Production Ratios.

The figure below represents trends in production data expressed in ratios of NATO and Warsaw Pact alliances. The comparison of average weapons production for the period 1987-89 shows that in six of the nine selected categories of conventional and strategic weapons, the Warsaw Pact has maintained a significant advantage over NATO. The figure also illustrates that in five weapons categories there was an increase in the Warsaw Pact production advantage from the "pre-Gorbachev" period (1984-86) to the "Gorbachev" period (1987-89).

Figure 1.
Comparative Production Ratios of Alliances
(Production For Own Armed Forces To Include Imports)



Comparison of Average Annual Weapons Production.

The next series of figures compare NATO and Warsaw Pact weapons production. They show annual production averages for the last 10 years (1980-89). These figures also show the relative contributions that the United States and Soviet Union make to their respective alliances.

Figure 2 shows that the Warsaw Pact advantage in production of main battle tanks, armored combat vehicles, and artillery (to include field artillery, mortars, and multiple rocket launchers equal to or greater than 100mm) was significant during the period 1980-1989.

Figure 2.

Selected Tactical Ground Weapons
(Average Annual Production For Own Armed Forces)

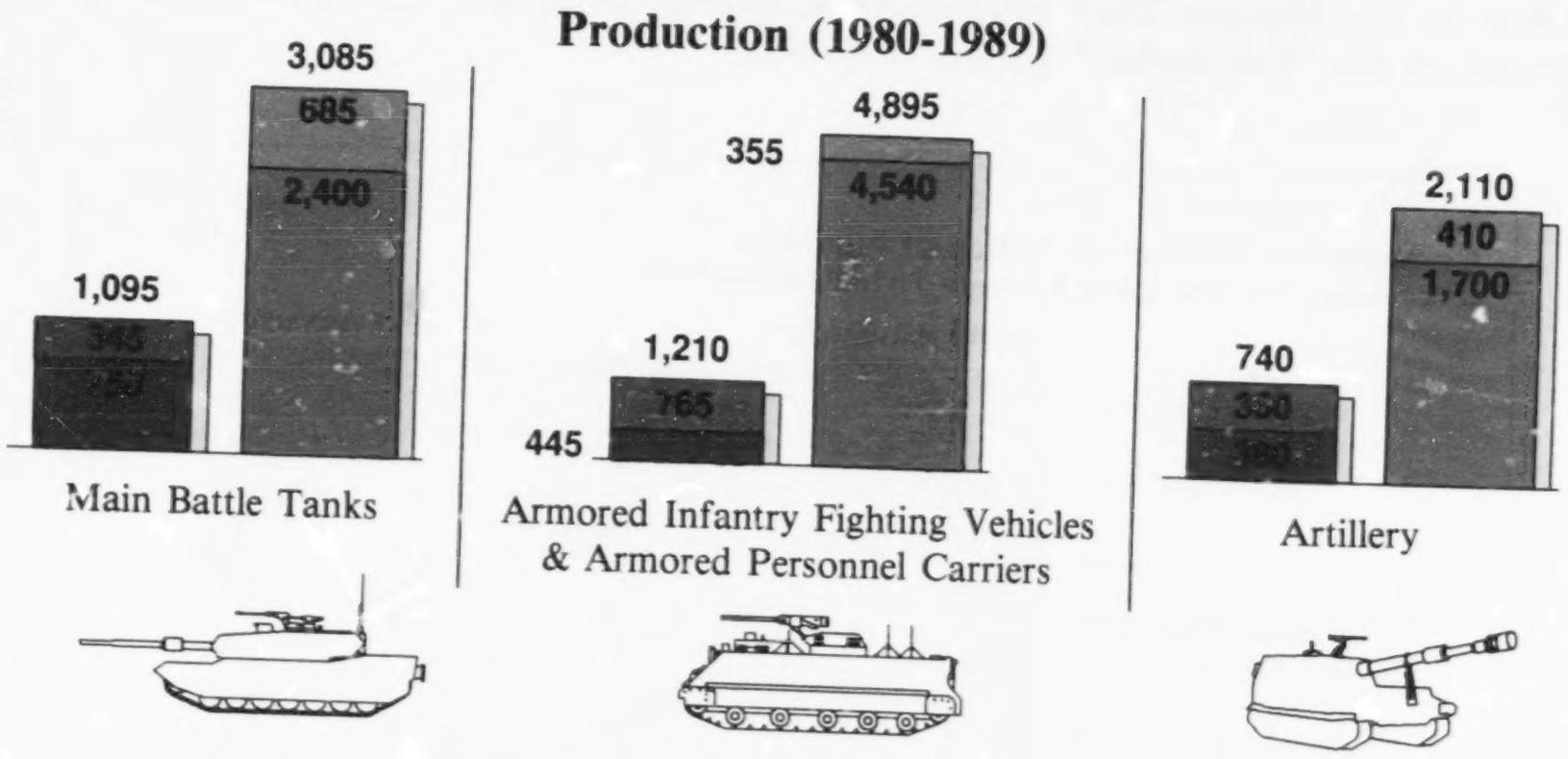


Figure 3 shows three air and naval weapons categories for comparison. The larger principal surface combatants category includes cruisers, destroyers, and larger frigates. The figure illustrates a NATO lead in this category, but a slight Warsaw Pact lead in fighter/interceptor and attack aircraft and attack submarine categories.

Figure 3.

Selected Air and Naval Weapons
(Average Annual Production For Own Armed Forces)

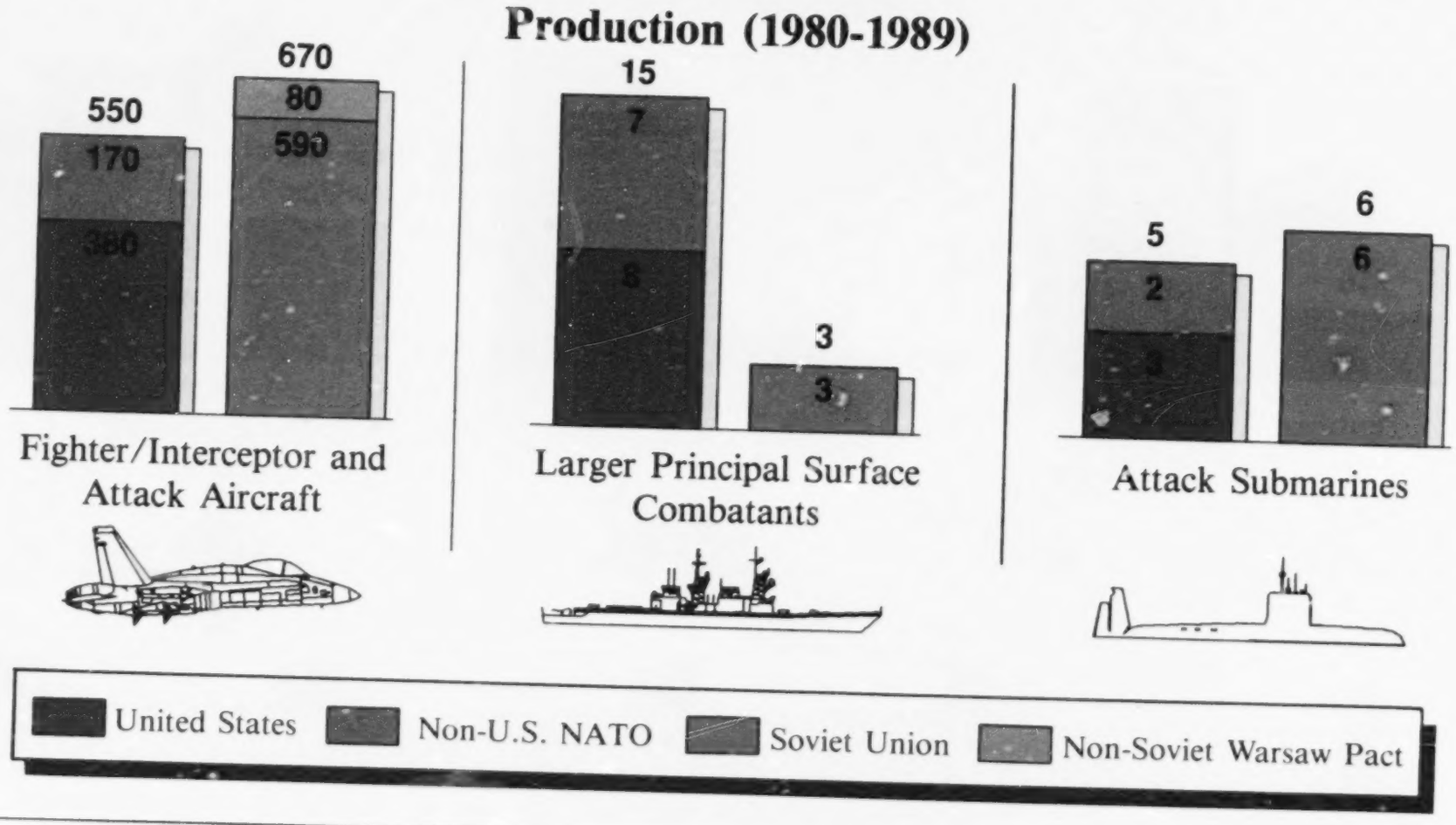
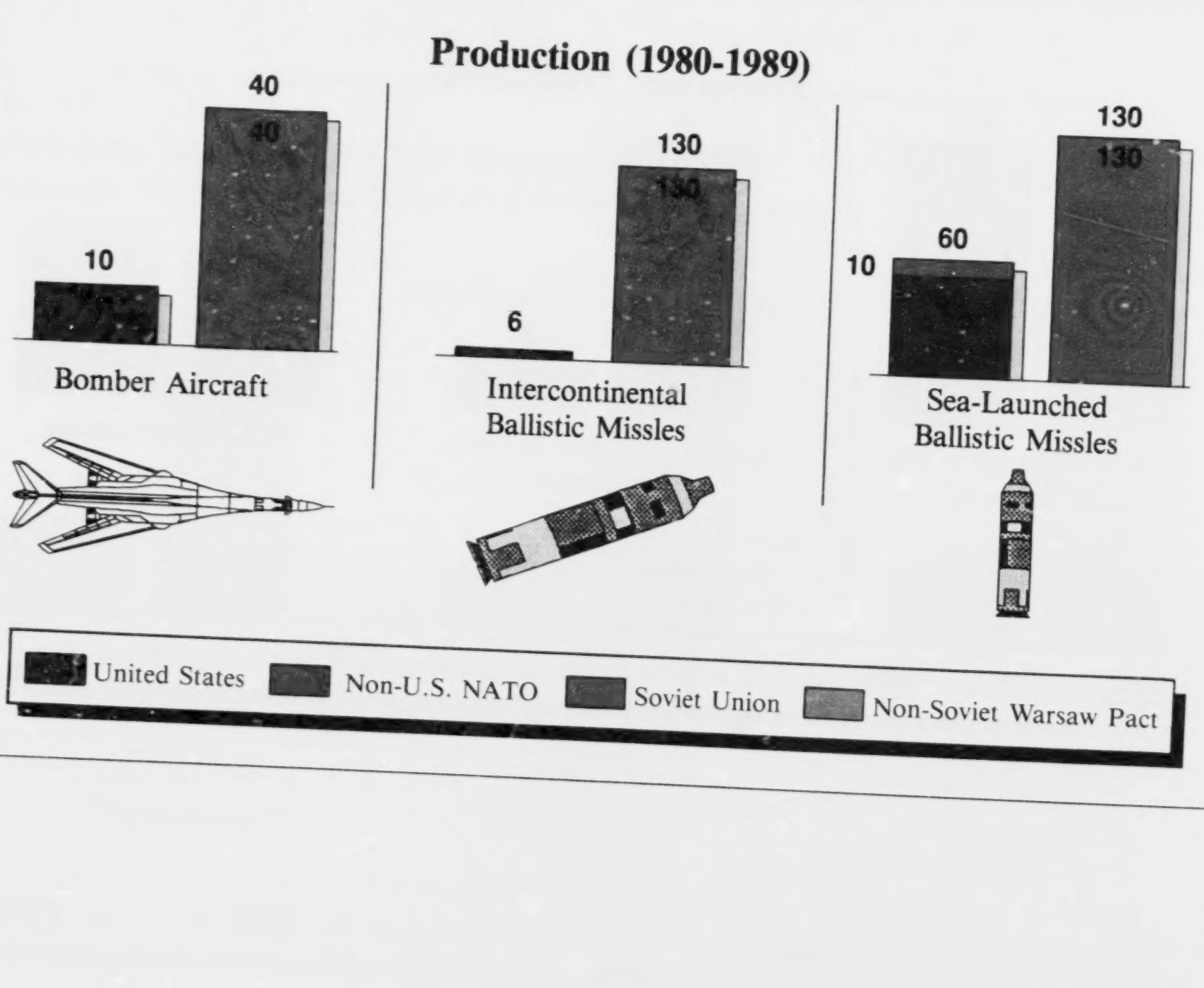


Figure 4 depicts a comparison of three strategic weapons categories. The overwhelming Soviet lead in bomber and ICBM production is readily apparent. The increased Soviet production of ICBMs is attributable primarily to production of new follow-on models of the SS-24 and SS-25 MIRV'ed missiles. Contributions by allies were insignificant. France is the only other nation producing SLBMs.

Figure 4.

Selected Strategic Weapons
(Average Annual Production For Own Armed Forces)



Production Trends: Selected Conventional Forces Europe (CFE) Categories.

The impact of arms control negotiations on military weapons production in NATO, and particularly the Warsaw Pact, has already been evidenced by a significant downturn in production rates on both sides. Moreover, the decline is expected to increase dramatically. Trends of four CFE weapons categories are depicted below.

It must be noted that, although the CFE talks relate only to the Atlantic-to-the-Urals region, the figures depict world-wide production totals.

Figure 5 illustrates that production of main battle tanks for both alliances is generally declining. Warsaw Pact 1989 tank production for its own armed forces was less than half of its 1988 level.

Figure 5.
Production Trends of Main Battle Tanks
(Annual Production For Own Armed Forces)

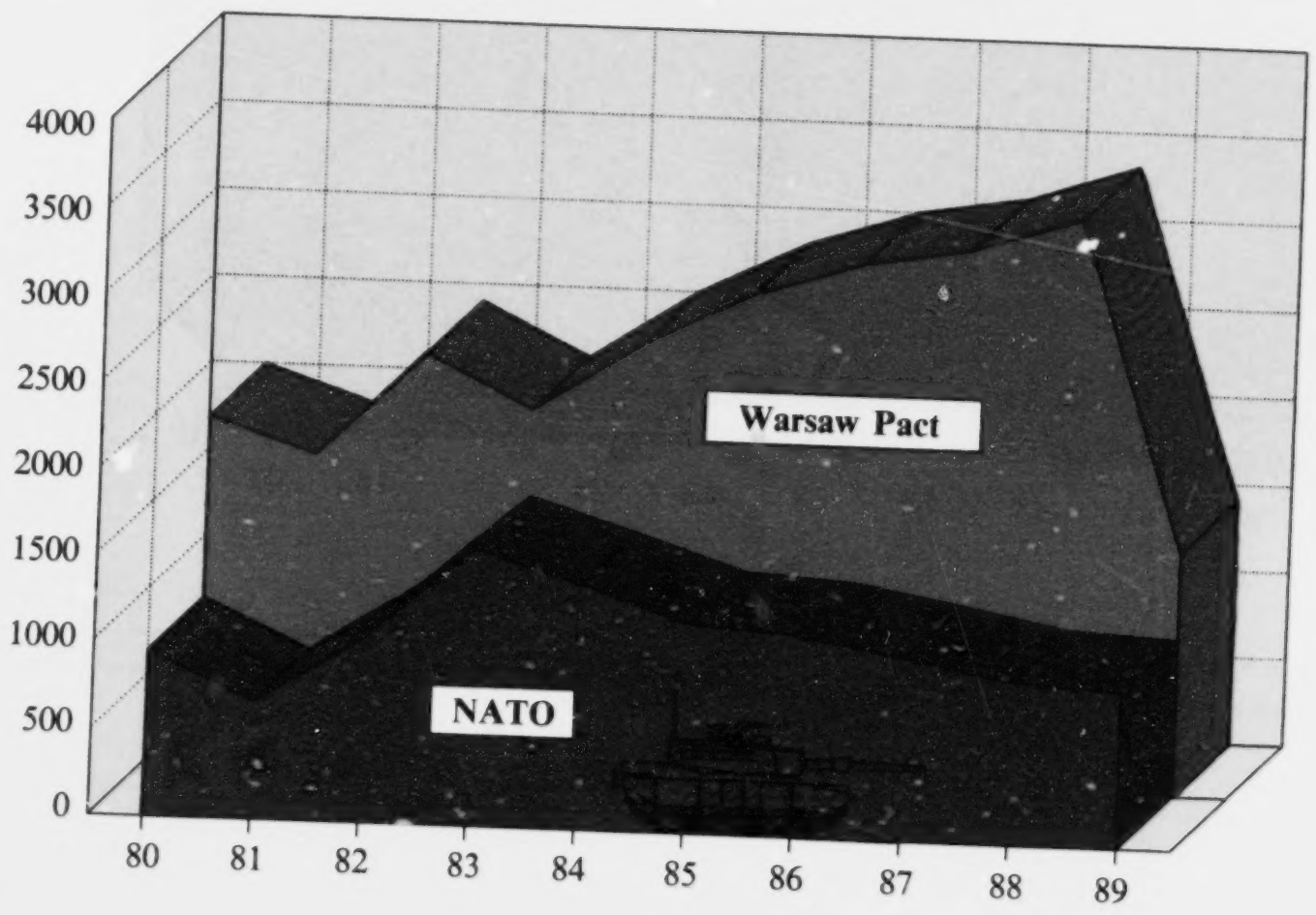


Figure 6 indicates a slight decline of Warsaw Pact production of artillery in 1989. Most of the decline is in towed smaller caliber systems.

Figure 6.
Production Trends of Artillery
(Annual Production For Own Armed Forces)

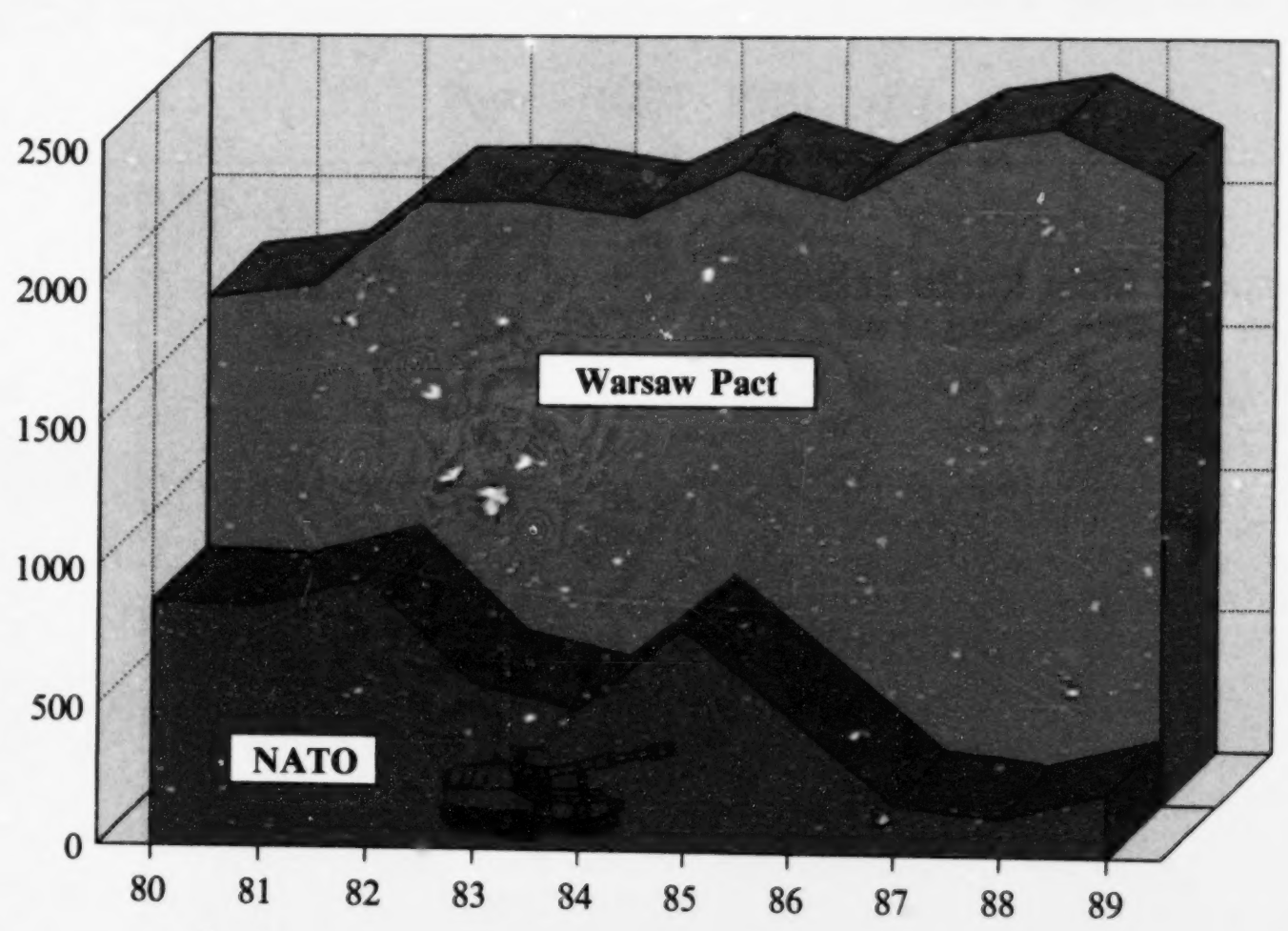


Figure 7 indicates that production of Warsaw Pact combat aircraft has declined steadily since 1987.

Figure 7.
Production Trends of Combat Aircraft
(Annual Production For Own Armed Forces)

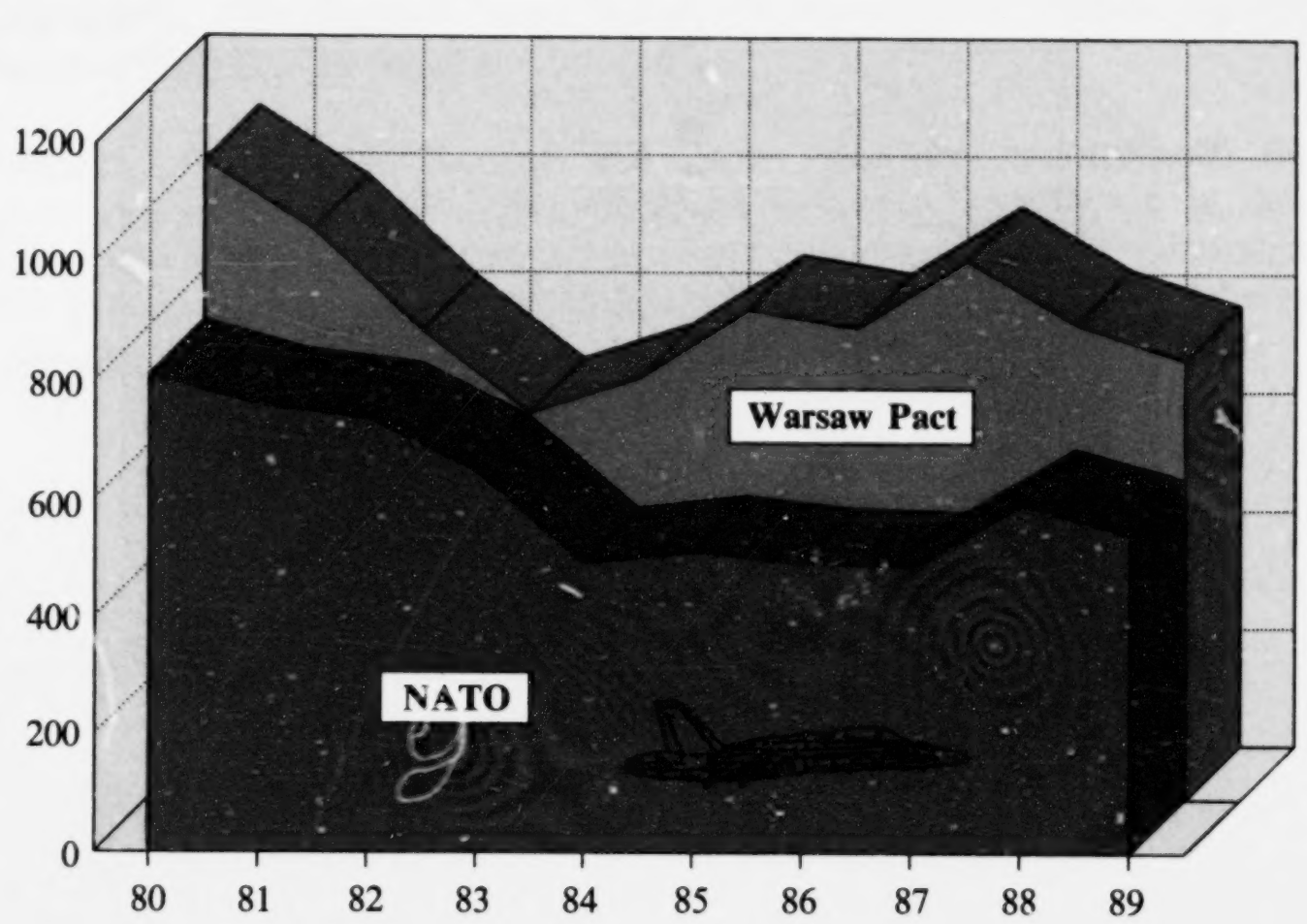
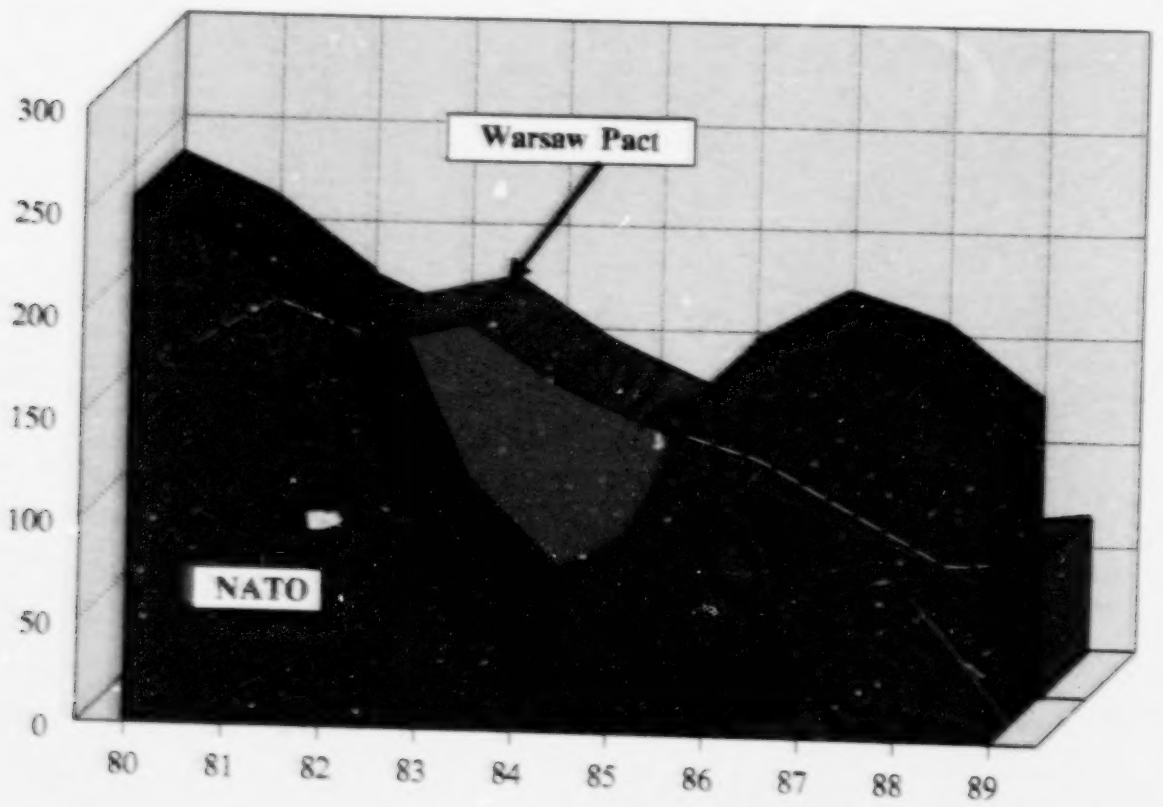


Figure 8 depicts a recent NATO advantage in attack helicopter production. The Warsaw Pact production has steadily declined from a 1983 high. Fluctuations in the trend lines are attributable to changes in production due to modernization efforts in both alliances.

Figure 8.
Production Trends of Attack Helicopters
(Annual Production For Own Armed Forces)



Summary.

Over the period 1980-89 Warsaw Pact production was more than double that of the NATO alliance in six of nine selected categories:

- **Main Battle Tanks**
- **Armored Infantry Fighting Vehicles and Armored Personnel Carriers**
- **Artillery**
- **Bomber Aircraft**
- **Intercontinental Ballistic Missiles**
- **Sea-Launched Ballistic Missiles**

NATO out-produced the Warsaw Pact only in the larger principal surface combatants category. Production was nearly equal in the attack submarines and fighter/ interceptor and attack aircraft categories.

The impact of unilateral action and Arms Control negotiations demonstrates that production rates for offensive conventional weapons categories is declining and will continue to do so dramatically over the next several years in both alliances. The impact will be far more severe on the Warsaw Pact than on NATO; however, annual military production will continue to favor the Warsaw Pact.

Introduction

INTRODUCTION

Purpose.

This report provides a comprehensive source of summary NATO and Warsaw Pact weapons production data. The report is a compilation of weapons produced by and for each nation in the alliances during the period 1975-1989. It displays the quantities of weapons produced by year in 34 categories.

Production Data and Data Sources.

The production data are presented in two ways, distinguished in the title of each table by the words "By" or "For". For each weapons category, **"By" data represent the total military production by the country or alliance without regard to the disposition of that military production. "For" data represent that portion of a nation's industrial military production earmarked for its own armed forces, plus imports received from production by other countries.**

Import and export data are not specifically addressed in this report. All data represent deliveries from new production. The information in this report is presented on a calendar-year basis.

Organization of the Report.

Executive Summary. The Executive Summary introduces the reader to the report and highlights relative NATO and Warsaw Pact production trends in selected categories during the period 1980-1989.

Part I. Production Trends in Selected Weapons Categories. This part presents the results of an analysis of production "For" trends comparing the United States with the Soviet Union, and NATO with the Warsaw Pact in fifteen (15) selected categories for the period 1975 through 1989.

Part II. Weapons Production Summary Data. Weapons Production data are summarized in a series of tables.

Summary Table 1a displays summary production "By" data for the U.S., non-U.S. NATO, and total NATO compared to that of the Soviet Union, non-Soviet Warsaw Pact, and total Warsaw Pact during the report period for each of the 34 weapons categories.

Summary Table 1b displays summary production "For" data and is organized in the same manner as Table 1a.

Summary Tables 2a and b display summary production "By" and "For" data for all 34 categories separately for the U.S.

Summary Tables 3a and b display annual summary production "By" and "For" data for all 34 categories for non-U.S. NATO countries.

Summary Tables 4a and b display annual summary production "By" and "For" data for each of the 34 categories for the Soviet Union.

Summary Tables 5a and b display annual summary production "By" and "For" data for each of the 34 categories for non-Soviet Warsaw Pact countries.

Appendix, Weapons Production Category Definitions. The appendix contains a definition of each of the 34 weapon categories used in this report. The categories were selected based upon their importance to the war fighting capability of an alliance or nation. The report categories are defined in sufficient detail to allow individual weapons to be assigned to one of thirty-four categories based upon functionality, physical characteristics, or armament.

Part I

Production Trends in Selected Weapons Categories

PART I

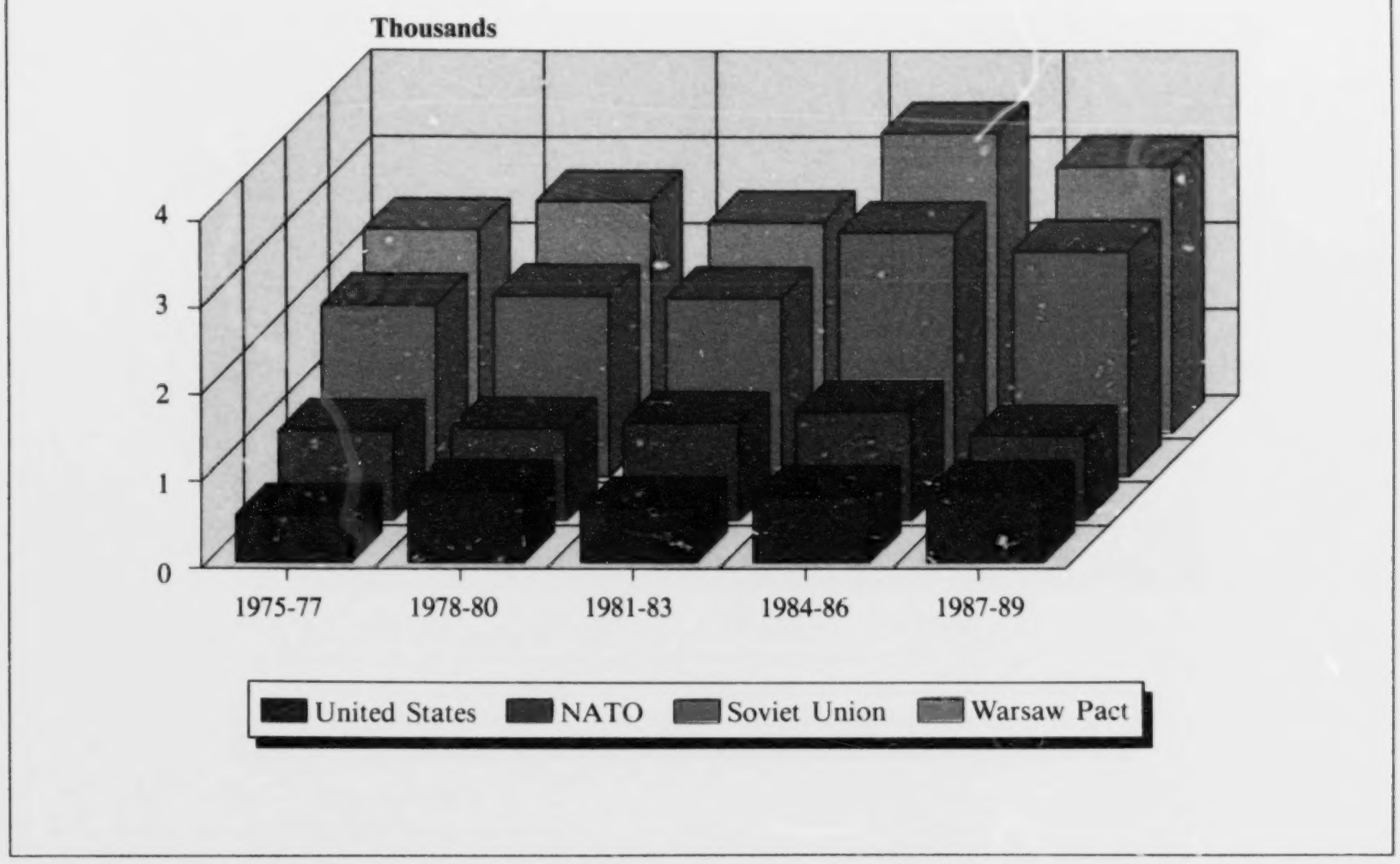
PRODUCTION TRENDS IN SELECTED WEAPONS CATEGORIES

This part of the report analyzes Production "For" trends data by comparing NATO to the Warsaw Pact and the U.S. to the Soviet Union. Production "For", sometimes referred to as "procurement", means the number of weapons manufactured in a country plus any imports and less any exports.

The categories displayed in this section were selected because of their relative military importance, their economic impact, and/or their contrasting trends during the report period. The 15 categories are listed below:

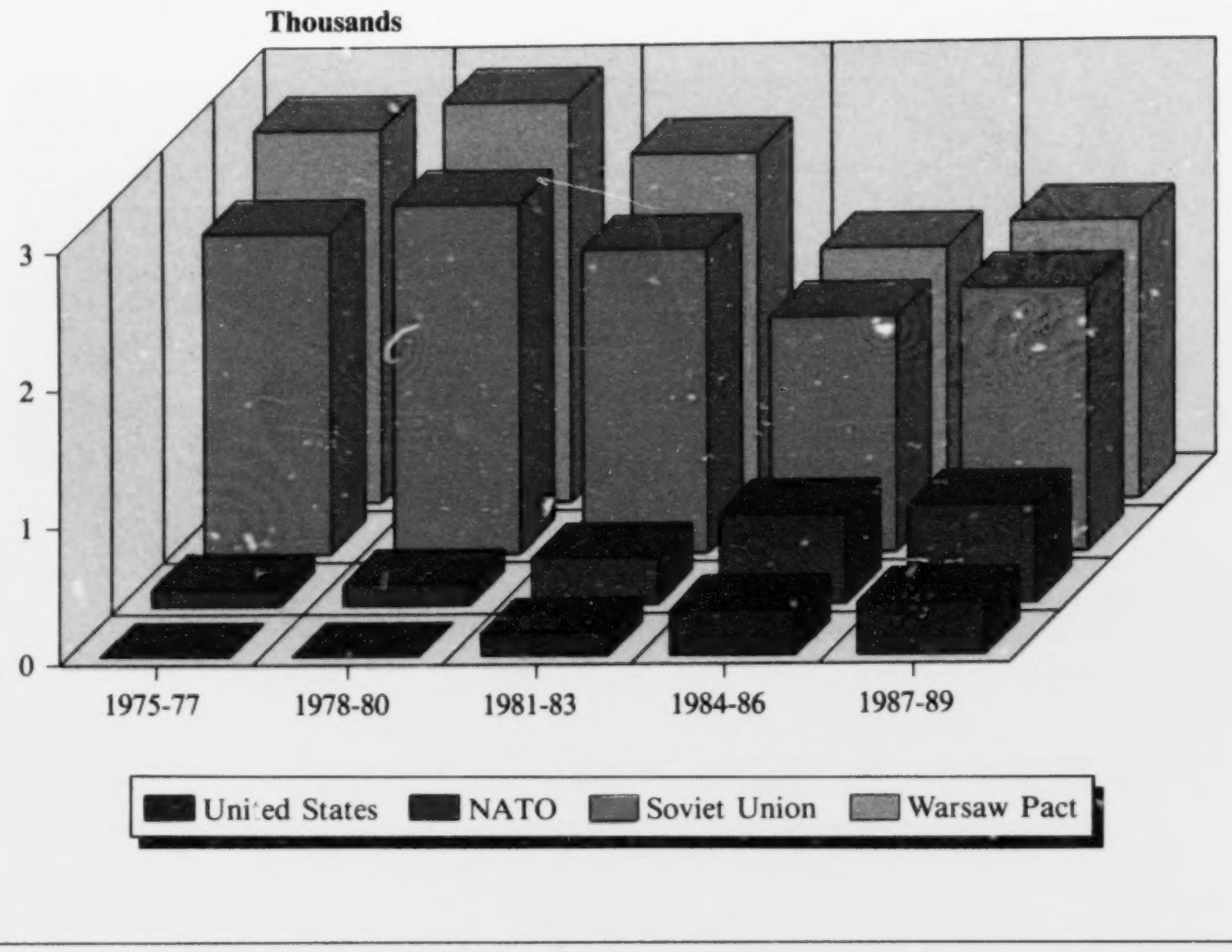
Category	Page
Main Battle Tanks	13
Armored Infantry Fighting Vehicles	14
Armored Personnel Carriers	15
Artillery	16
Surface-to-Air Missiles (SAMs)	17
Attack Helicopters	18
Fighter/Interceptor and Attack Aircraft	19
Attack Submarines	20
Larger Principal Surface Combatants	21
Smaller Frigates and Corvettes	22
Amphibious Ships	23
Bomber Aircraft	24
Ballistic Missile Submarines (SSBNs)	25
Intercontinental Ballistic Missiles (ICBMs)	26
Sea-Launched Ballistic Missiles (SLBMs)	27

Figure 9.
Main Battle Tanks
(Average Annual Production For Own Armed Forces)



From 1975 through 1986 the U.S. allies contributed a significantly greater share of alliance tank production than did the Soviet allies. West German production of the Leopard II 120mm main battle tank accounted for more than one-third of the non-U.S. NATO tank production--over 45 percent when exports to the Netherlands are considered. The U.S. produced two-thirds of all NATO tanks, while the Soviets have accounted for four out of five Warsaw Pact tanks. U.S. production of the M1 105mm tank started in 1980 and changed in 1986-1987 to production of the M-1A1 120mm tank. Production of the M-1A1 tank is expected to decline from about 800 per year to 400 per year starting in 1992. Non-U.S. NATO production showed a marked decline starting in 1987. The 1,400 tanks produced for Soviet forces in 1989 was almost twice the U.S. production. Soviet tank production for its own use dropped by almost 60 percent in 1989.

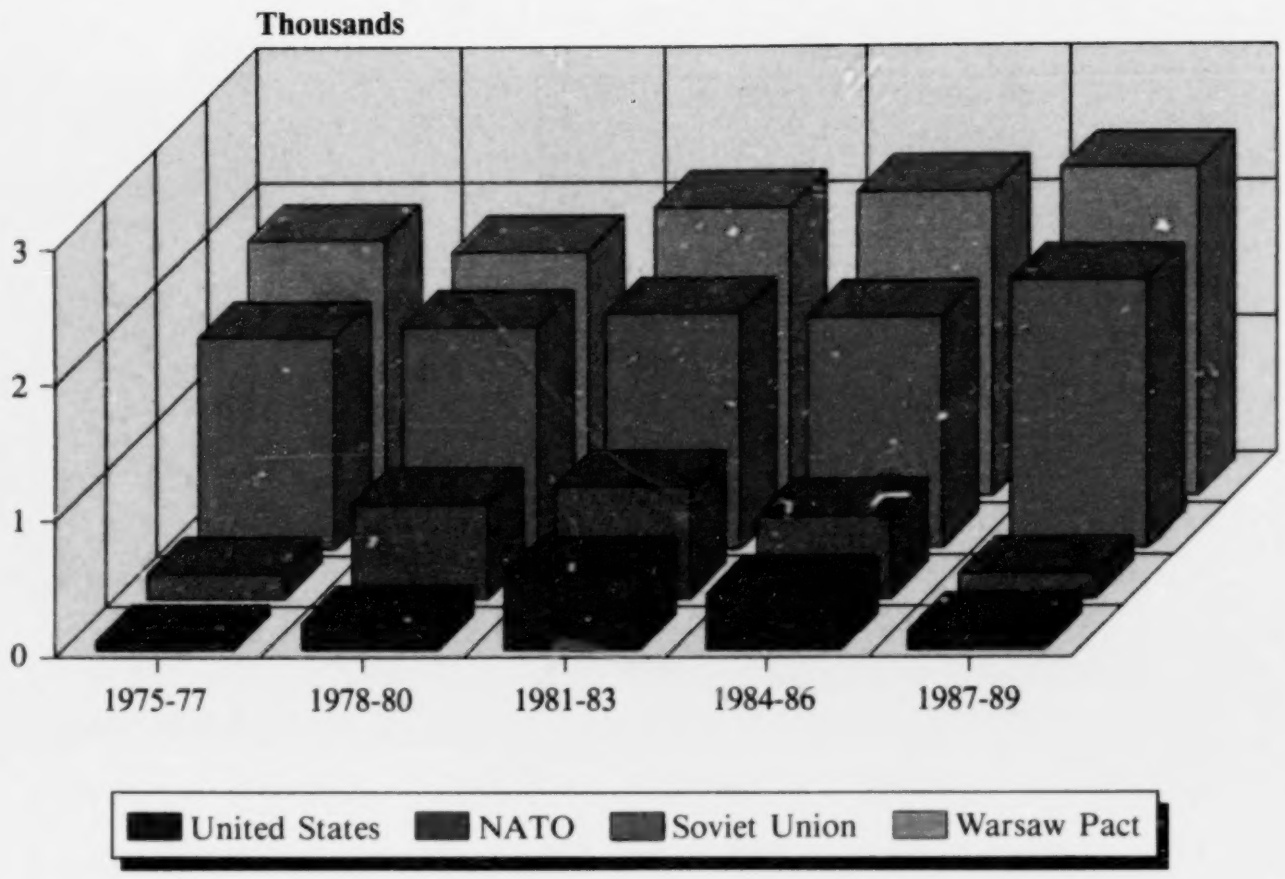
Figure 10.
Armored Infantry Fighting Vehicles
(Average Annual Production For Own Armed Forces)



U.S. production of the M2 Bradley started in 1981 and continued at an annual average of 350 vehicles through 1989. Non-U.S. NATO production averaged about 250 vehicles per year for the period 1982-1989, the bulk of which consisted of the French AMX-10 P/PC, Dutch YPR-765, and the British Warrior.

For the same period, Soviet AIFV procurement was at a relatively high level of about 1,800 vehicles per year. Non-Soviet Warsaw Pact procurement was less than 10 percent of the total Warsaw Pact annual rate. Over the last ten years, Soviet AIFV procurement was over four times U.S. procurement and the trend is the same for the future.

Figure 12.
Artillery
(Average Annual Production For Own Armed Forces)

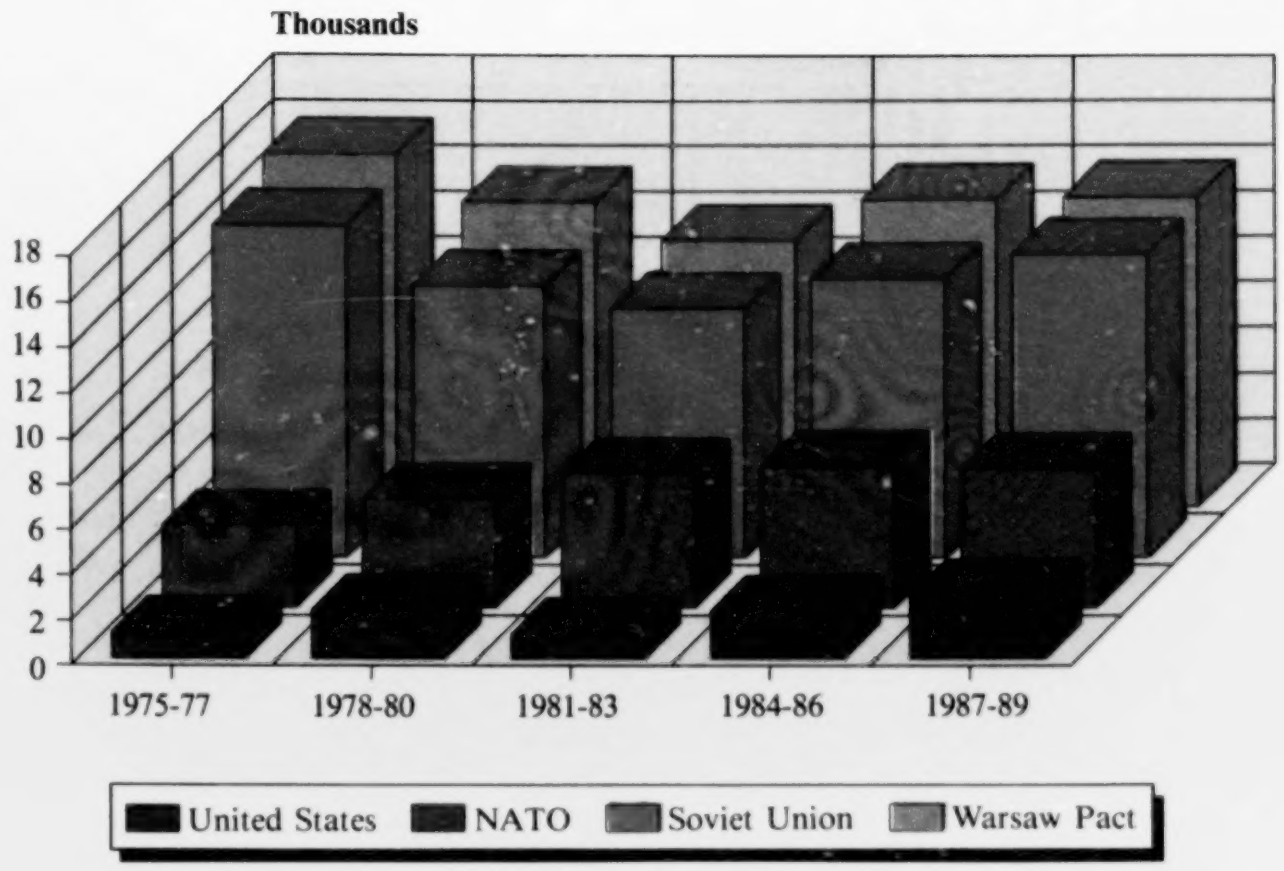


This category includes field artillery, mortars, and multiple rocket launchers (MRL) equal to or greater than 100mm.

Warsaw Pact production and acquisition dwarfed NATO's throughout the decade with NATO production declining significantly during the period 1981-1989. Additional declines in future years for both NATO and the Warsaw Pact are expected. Production of artillery for U.S. forces consisted primarily of the M-109 and M-198 155mm howitzers, the MLRS, and 107mm mortars.

Non-Soviet Warsaw Pact countries are producing far more howitzers, guns, mortars, and MRL's for their own services than are the non-U.S. NATO nations. Total Warsaw Pact procurement of artillery was over four times NATO's procurement during the period 1975-1989. Total Warsaw Pact production reached a high of almost 2,400 weapons in 1988, but is expected to decline in future years.

Figure 13.
Surface-to-Air Missiles (SAMs)
(Average Annual Production For Own Armed Forces)

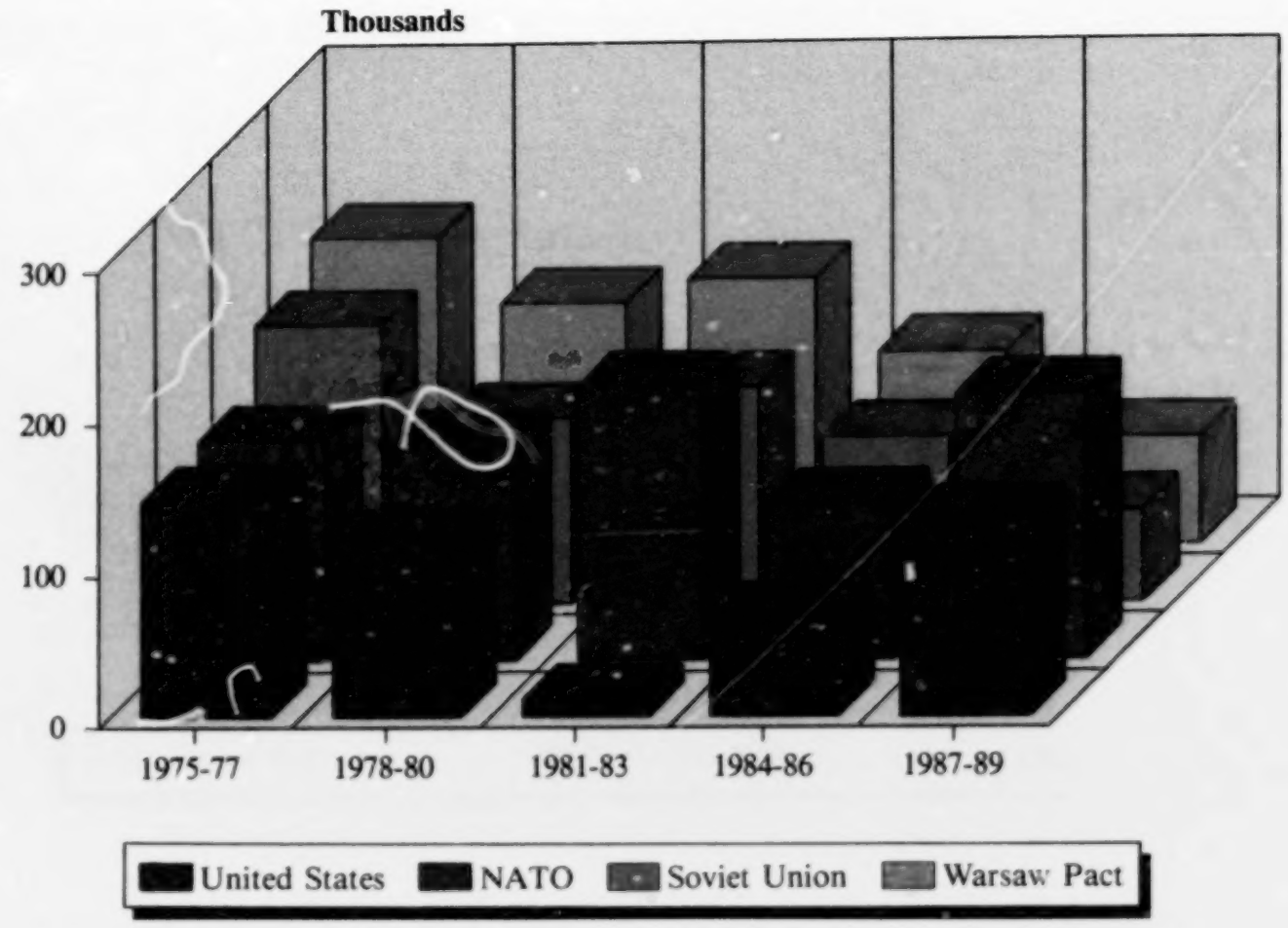


This category includes both crew-served land-based and sea-based SAMs, but excludes hand-held missiles.

During the 1980s, non-U.S. NATO nations procured over two-thirds of the total NATO SAM acquisition. The United Kingdom produced and received over one-half of the land-based SAMs produced for non-U.S. NATO during the 1983 to 1989 period. The United Kingdom also produced and received the large majority of all sea-based SAMs procured for non-U.S. NATO countries in the past 15 years. Increased U.S. procurement of the Hawk (for the USMC), Chaparral, and Patriot enhanced the overall NATO annual production quantities of land-based SAMs later during the period.

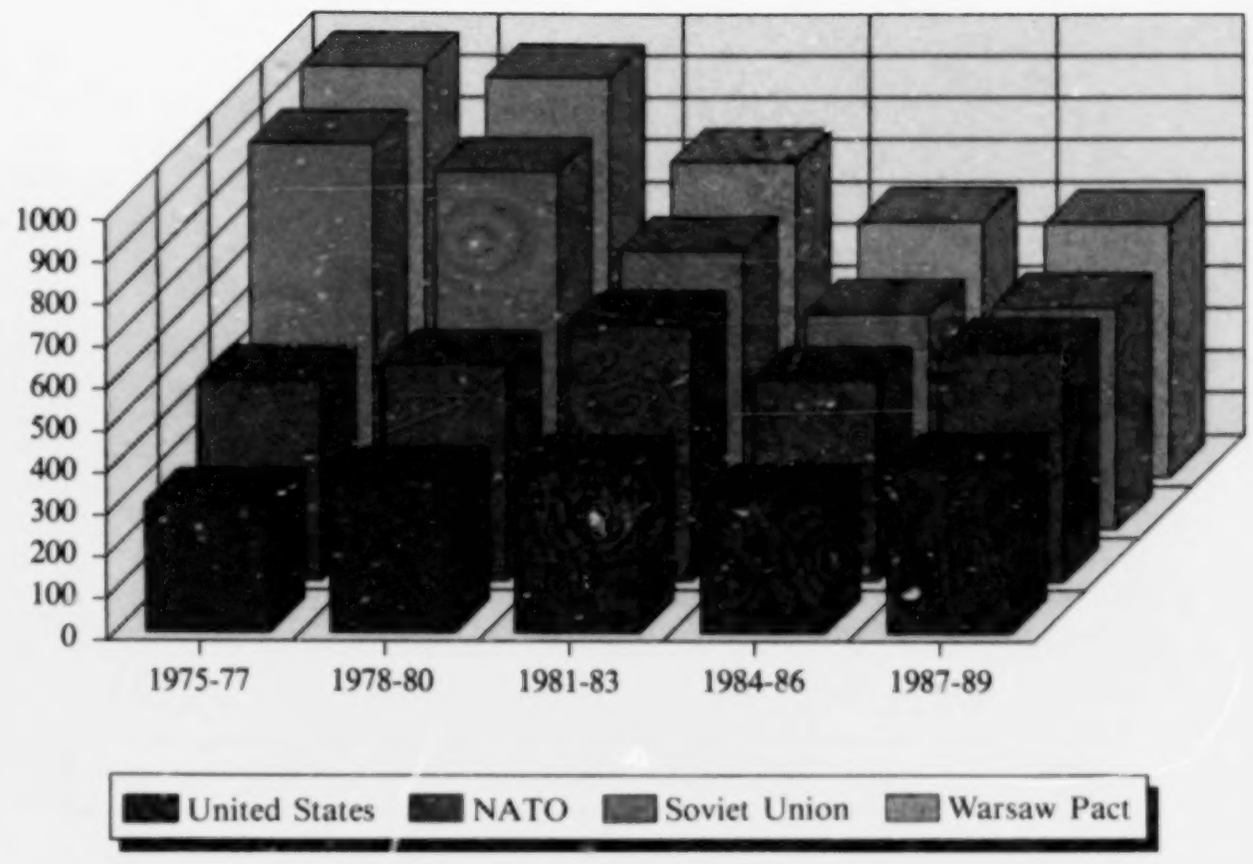
Soviet production for it's own use continued in 1989 at a high level -- about 12,000 total missiles per year. Production of sea-based SAMs continued to decline from their 1977 peak to less than 1,000 per year.

Figure 14.
Attack Helicopters
(Average Annual Production For Own Armed Forces)



Significant non-U.S. NATO attack helicopter procurement during the 1980s included the French AS-355 Ecureuil 2 and SA-341/342 Gazelle, the British Lynx WG-13/AH1, and the German PAH-1. U.S. production during the decade consisted primarily of the Apache AH-64. All Non-Soviet Warsaw Pact Hinds were imported from the U.S.S.R. Soviet production for its own armed forces declined steadily since 1983 and is expected to fall even further in the 1990s. Over the last four years, U.S. procurement has been almost double Soviet procurement.

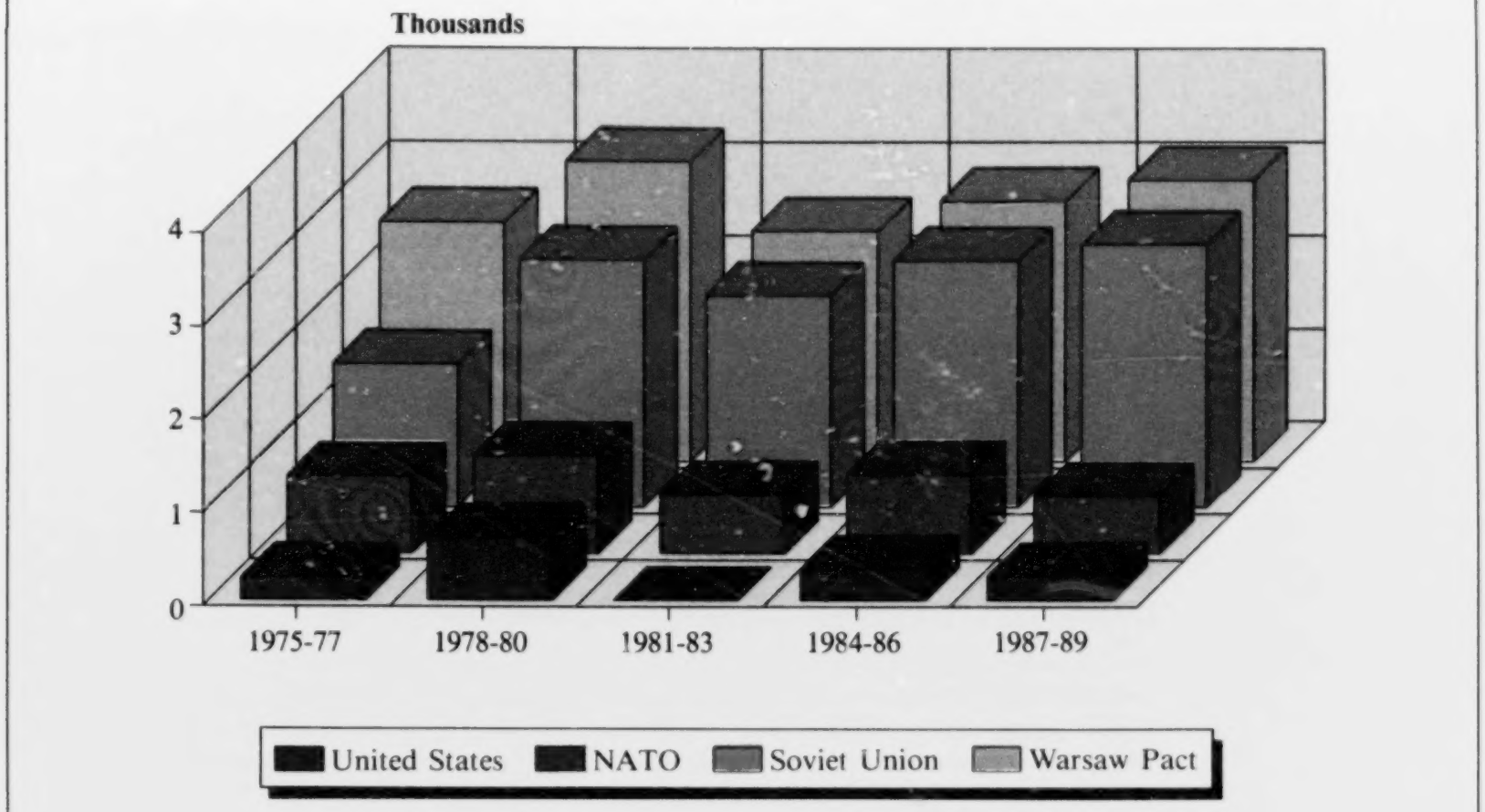
Figure 15.
Fighter/Interceptor and Attack Aircraft
(Average Annual Production For Own Armed Forces)



Non-U.S. NATO nations acquired about a third of total NATO procurement over the last decade. Ongoing acquisition by the U.S. consists primarily of F-15s, F-16s, FA-18s, and AV-8Bs. Recent non-U.S. NATO procurement consists primarily of the British Harrier, the French Mirage 2000, the Italian, British, and German co-produced Tornado, and the Belgian, Danish, and Dutch licensed production of the F-16.

Warsaw Pact production for their forces has steadily declined to about one-half of their annual procurement of ten years ago. Recent Soviet production consists primarily of the MIG-29 Fulcrum, MIG-31 Foxhound, SU-25 Frogfoot, SU-27 Flanker, and SU-24 Fencer. Non-Soviet Warsaw Pact acquisition has consisted primarily of older Soviet fighter models and domestically-made combat aircraft, with more recent acquisitions including Soviet Fulcrums and Frogfoots.

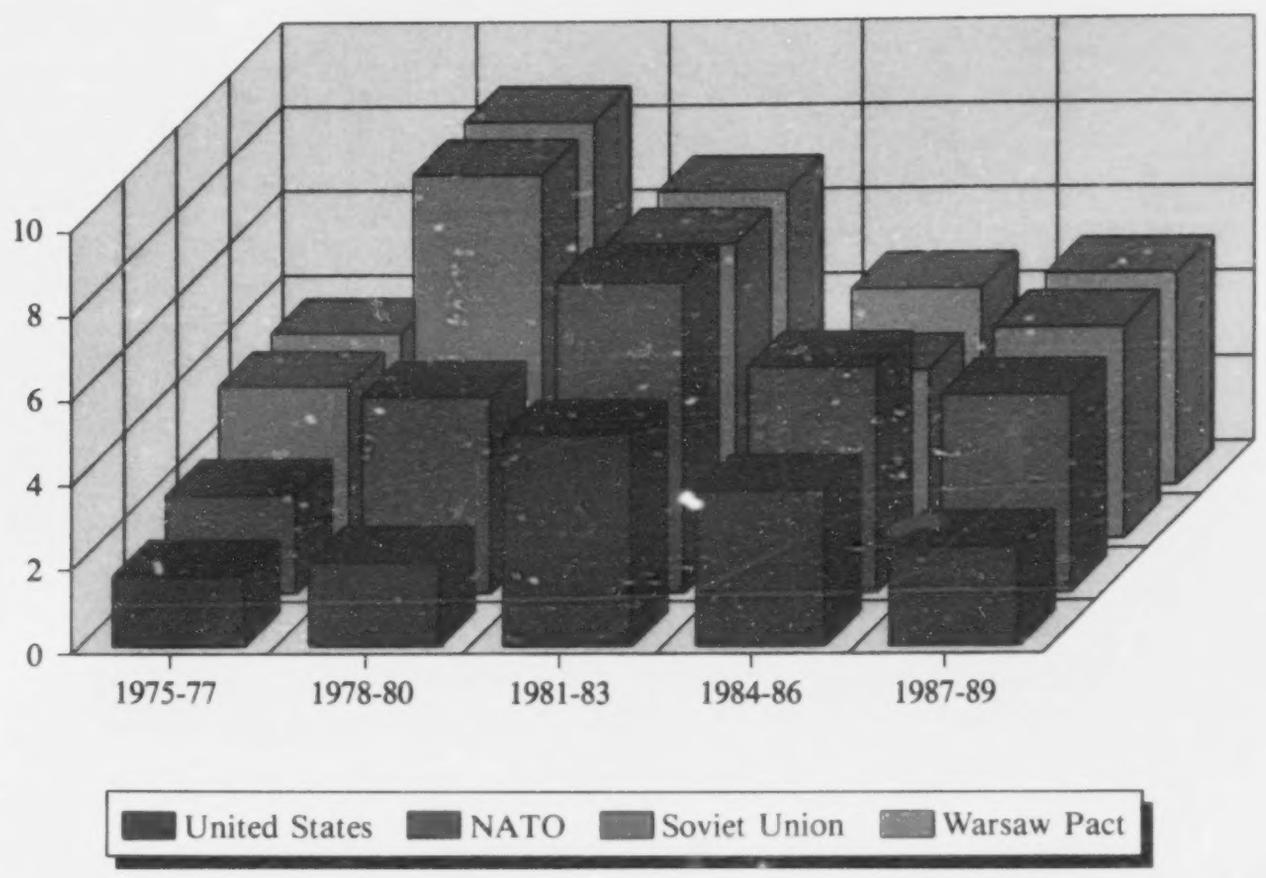
Figure 11.
Armored Personnel Carriers
(Average Annual Production For Own Armed Forces)



U.S. procurement of LAV-25s and M113s averaged about 350 vehicles per year from 1984-1988. Production fell to 30 in 1989 and no procurement is planned from 1990 to 1992. Non-U.S. NATO countries, notably France, Germany, and Greece, produced about 480 vehicles per year from 1984-1988, but production fell to 175 in 1989.

Soviet APC production continued through the 1980s at an annual average of about 2,600 vehicles per year, peaking in 1989. Non-Soviet Warsaw Pact APC production was only 5 to 10 percent of the total Warsaw Pact production through the decade. Recent Soviet production consisted primarily of the BTR-80P and the MTLB. Production for Soviet forces was over 13 times the U.S. in the 1980s.

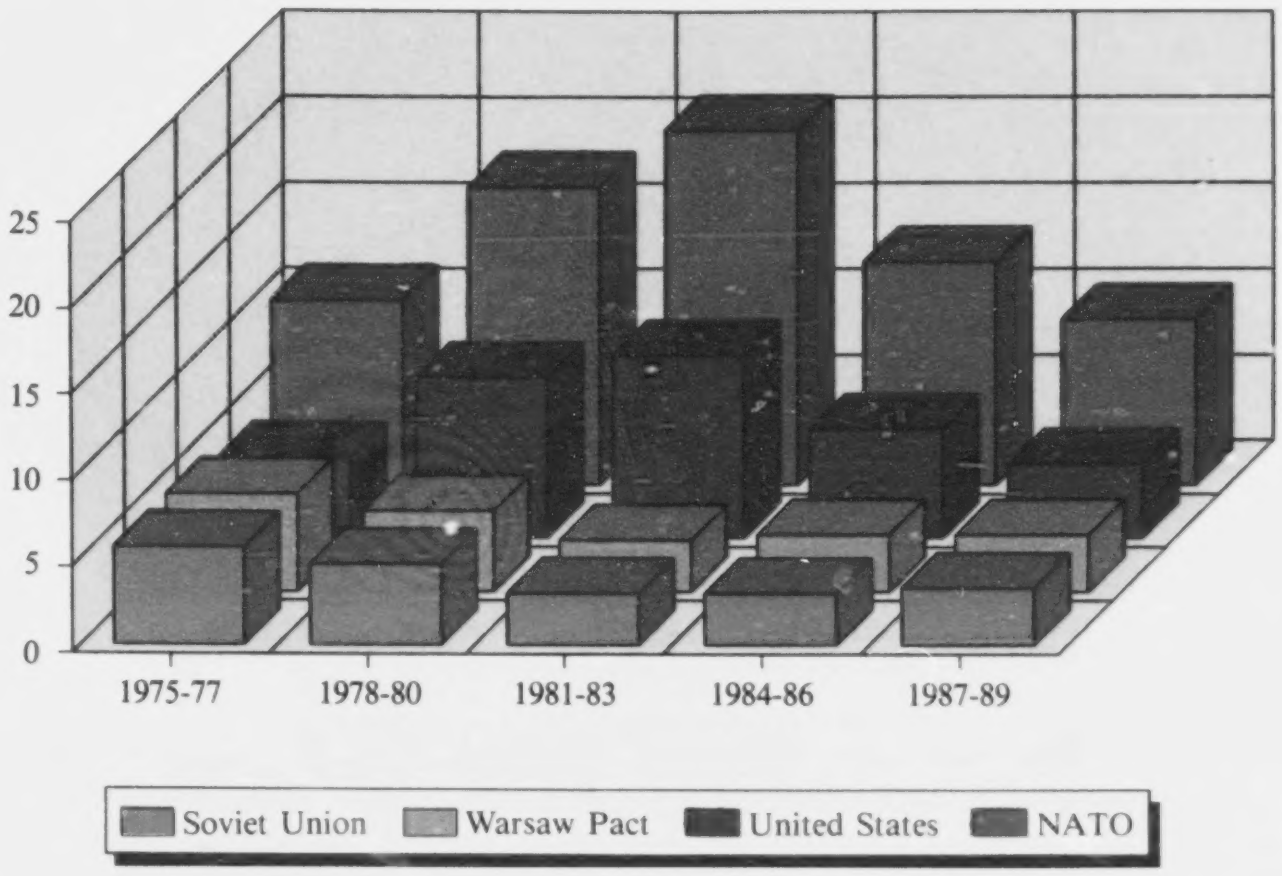
Figure 16.
Attack Submarines
(Average Annual Production For Own Armed Forces)



This category includes all attack submarines. It excludes the SSBNs, which are discussed separately.

Non-U.S. NATO countries have produced/procured 40 percent of NATO's attack submarines, while the non-Soviet Warsaw Pact countries have procured only two Soviet-built submarines over the entire period 1975-1989. U.S. production of the Los Angeles-class nuclear-powered attack submarine declined from the peak year of 1981 when six were produced, to about three per year at the present time. Soviet procurement has similarly declined from its 1980 peak of ten per year to an average of five per year for the period 1987-1989. The newer Akula- and Sierra-class nuclear attack submarines are significantly more capable than previous submarines in this class.

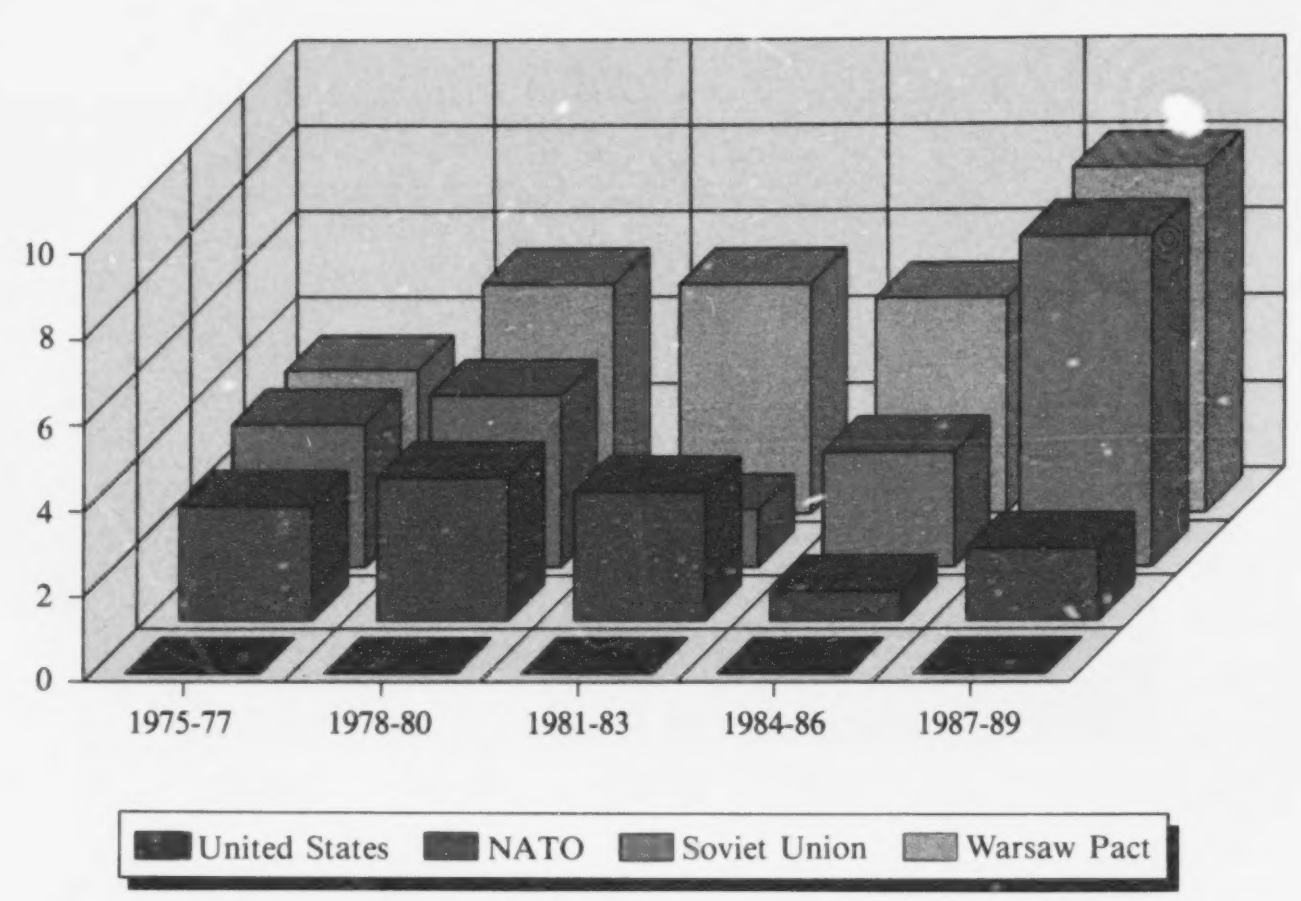
Figure 17.
Larger Principal Surface Combatants
(Average Annual Production For Own Armed Forces)



This category includes cruisers, destroyers, and larger frigates.

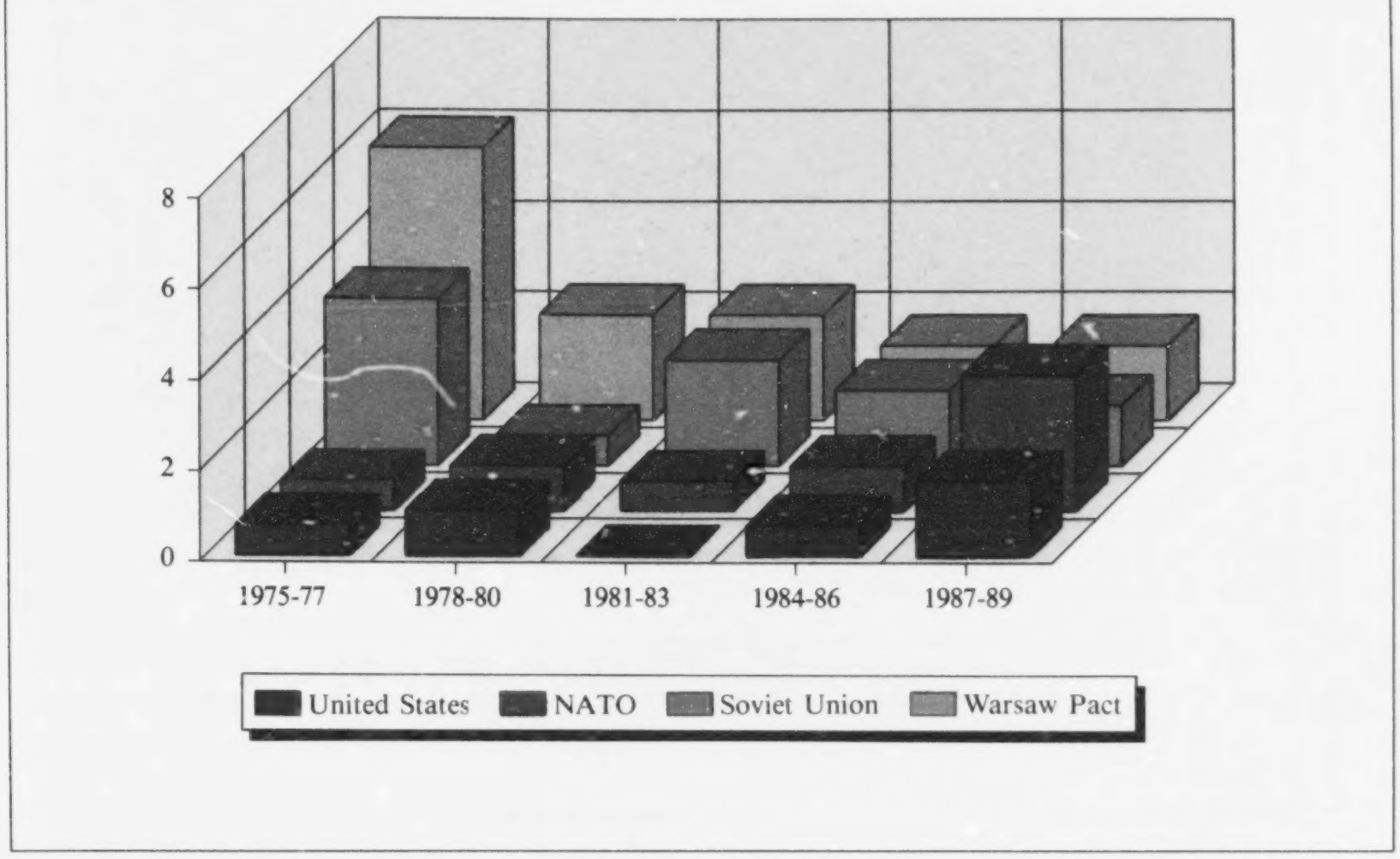
On the average, NATO production for its forces has been almost four times that of the Warsaw Pact over the period 1975-1989; however, NATO procurement declined during the period 1982-1989. During this period, non-U.S. NATO countries contributed nearly half of NATO's total. All non-U.S. NATO production for the period 1987-1989 consisted of frigates, except for two French Leagues class destroyers. United States acquisitions during the period included Ticonderoga cruisers and Perry guided-missile frigates. During the period 1987-1989 the Soviet Navy received two cruisers and eight destroyers. The non-Soviet Warsaw Pact countries have procured only one larger principal surface combatant since 1975.

Figure 18.
Smaller Frigates & Corvettes
(Average Annual Production For Own Armed Forces)



During the period 1975-1989 Warsaw Pact production of these vessels for it's naval forces was over two times that of NATO. The non-Soviet Warsaw Pact nations' procurement was two-thirds that of NATO's. The United States produced no vessels in this category. East German production of the Parchim I and Parchim II, Soviet production of the Grisha III and V, French production of D'Estienne-D'Orves, and Italian production of the Minerva represent over 85 percent of the total number of ships procured in this category during the past ten years.

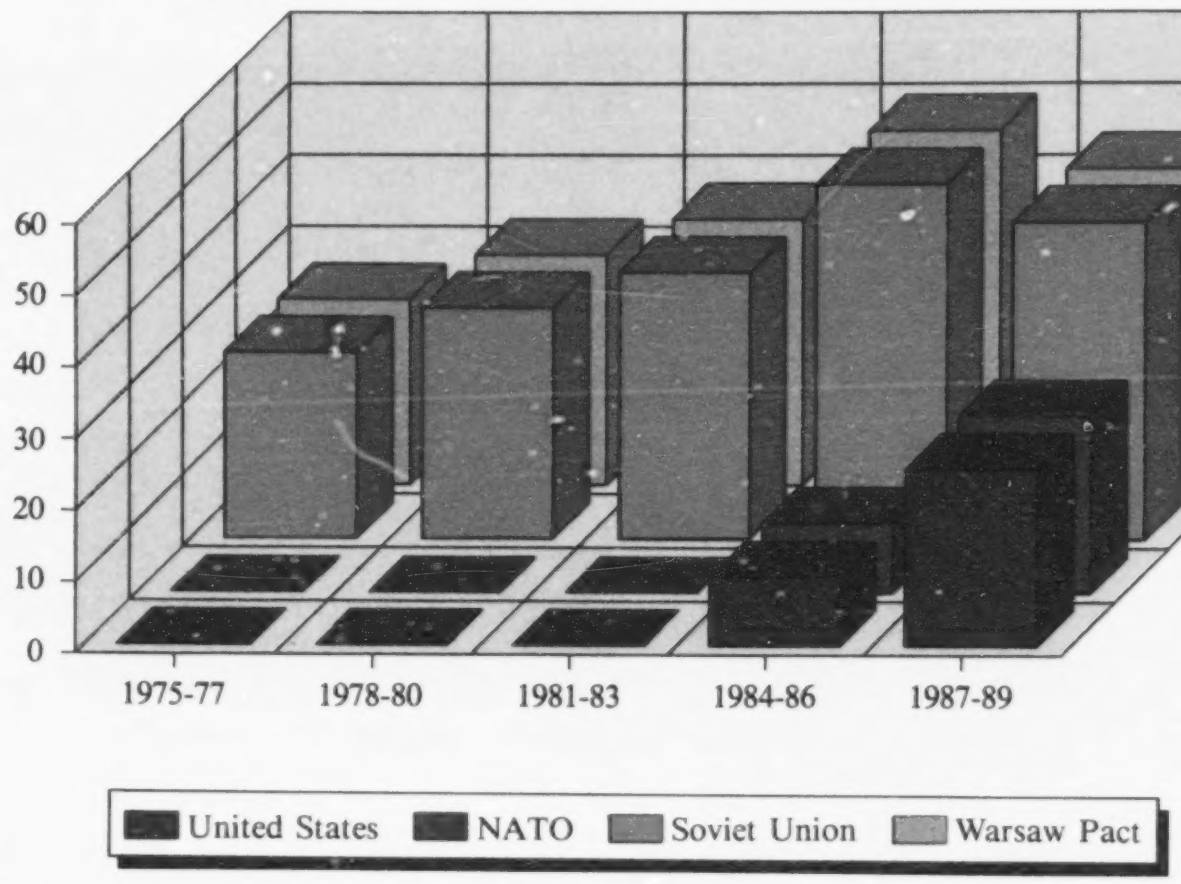
Figure 19.
Amphibious Ships
(Average Annual Production For Own Armed Forces)



This category includes amphibious assault ships and larger and smaller amphibious warfare ships; it does not include landing craft.

Warsaw Pact procurement of amphibious ships was more than double NATO's during the period 1975-1989. NATO procurement occurred largely during the period 1985-1989. Soviet acquisition of Ivan Rogov LPD- and Ropucka LST-class ships accounted for the overwhelming majority of Warsaw Pact ships in this category.

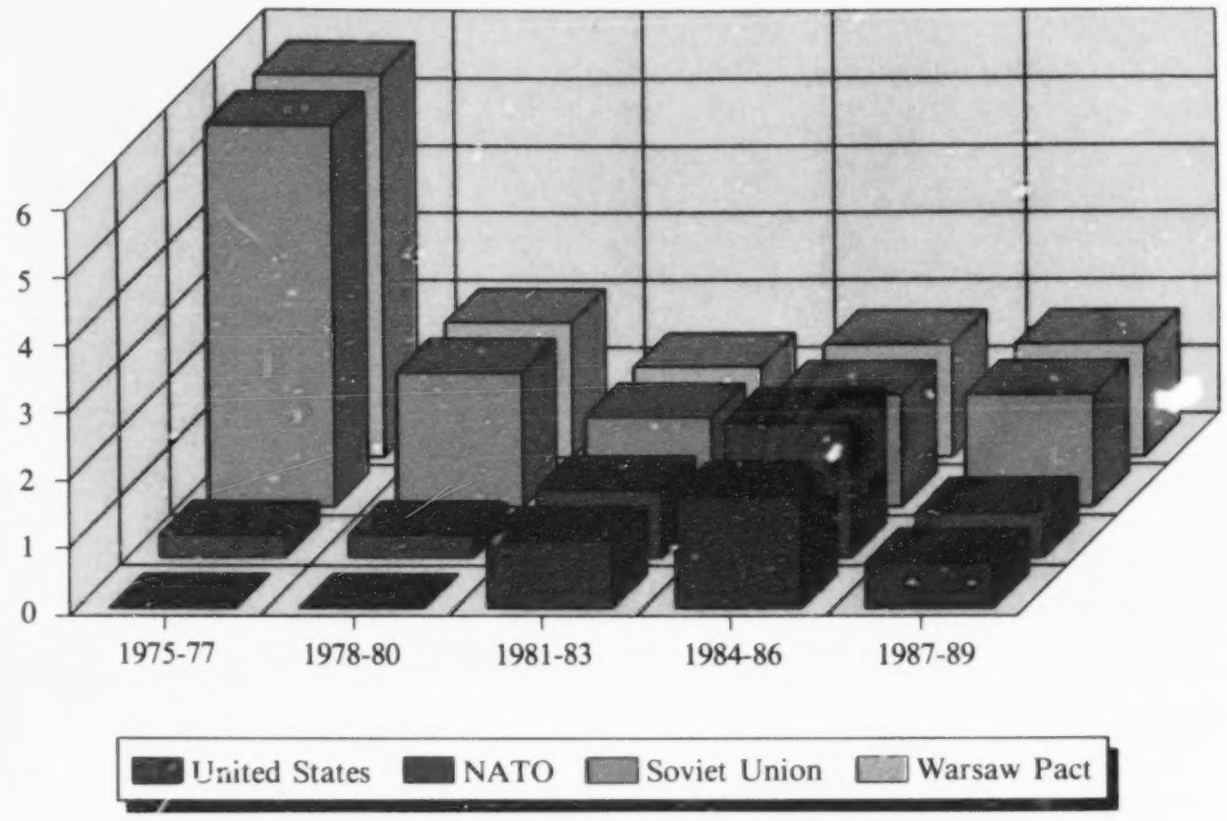
Figure 20.
Bomber Aircraft
(Average Annual Production For Own Armed Forces)



During the period 1985-1988, the U.S. produced just over 100 B-1Bs as replacements for the 30-year-old B-52s.

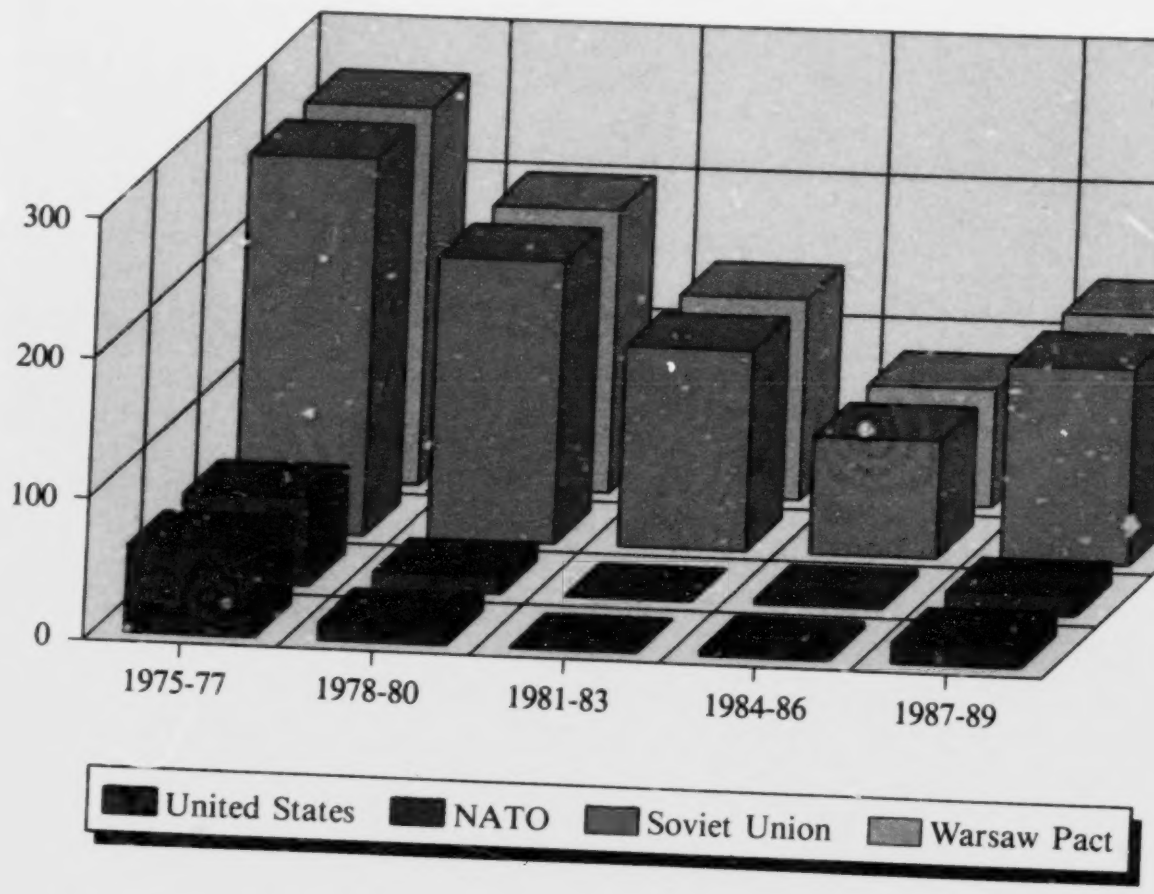
Meanwhile, the Soviets are producing about 40 Backfire TU-22, Bear TU-95, and Blackjack TU-160 bombers annually. The Soviets initiated production of the H Model Bear, an air-launched cruise missile carrier, in 1981. There was a dramatic expansion in industrial floorspace in the 1980s for production of the Soviet large aircraft. None of the non-Soviet or non-U.S. NATO nations produce or receive bomber aircraft.

Figure 21.
Ballistic Missile Submarines (SSBNs)
(Average Annual Production For Own Armed Forces)



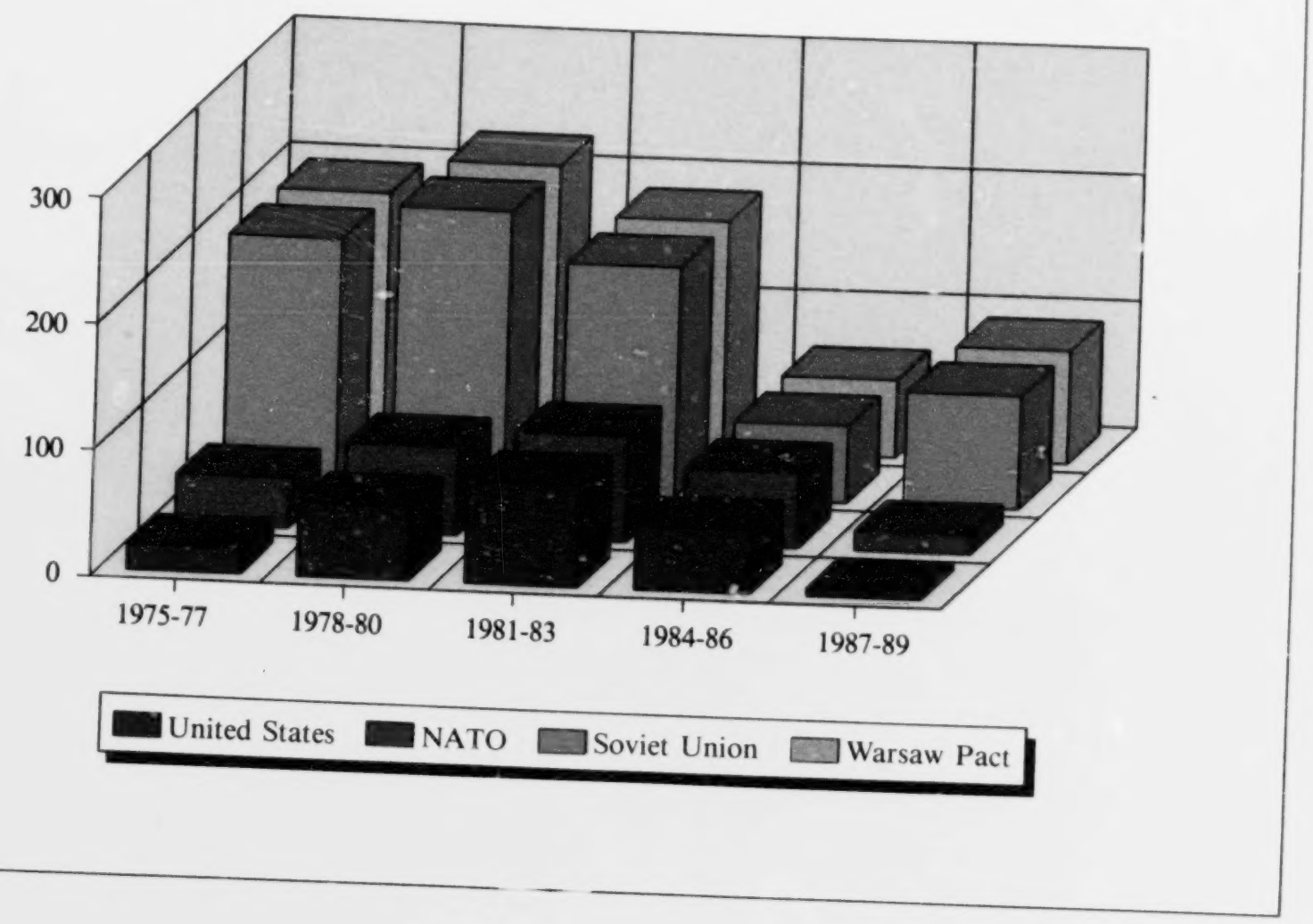
The USSR has maintained a relatively constant production of one or two SSBNs per year (Delta III and IV and Typhoon) for the past ten years. This is down by two-thirds from the mid to late 1970s annual output rates. The U.S. has maintained an average annual production of about one Ohio-class SSBN per year during the past ten years. Other than three SSBNs produced by France, no other non-U.S. NATO or non-Soviet Warsaw Pact nations has produced or received any SSBNs in the last 15 years.

Figure 22.
Intercontinental Ballistic Missiles (ICBMs)
(Average Annual Production For Own Armed Forces)



Soviet production of ICBMs dwarf that of the U.S. The USSR is replacing systems produced only 10 years ago with more modern, accurate, and capable systems--some of which are mobile--that have individually targetable multiple warheads, e.g., SS-18 Satan, SS-25 Sickle, and SS-24 Scalpel. Note that during the period 1987-1989 the Soviet ICBM production rebounded from the 1984-86 low, as output of the new models increased. United States Peacekeeper annual production was about 14 missiles per year during the period 1986-1989. None of the non-Soviet Warsaw Pact or non-U.S. NATO nations produce or receive ICBMs.

Figure 23.
Sea-Launched Ballistic Missiles (SLBMs)
(Average Annual Production For Own Armed Forces)



As in the case of ICBMs, the Soviet Union is continuing to produce more sophisticated and more accurate SLBMs, as well as new missiles of greater range, e.g., SS-N-23 Skiff and SS-N-20 Sturgeon. The U.S. production of the Trident C-4 tapered to zero in 1987 from its 1980 peak; U.S. production of the Trident D-5 started in 1989 and is expected to be about 65 missiles per year starting in 1990. The Soviets' average annual production for the period 1986-1989 was about 100 missiles. Other than a small annual quantity produced by France, no other non-U.S. NATO or non-Soviet Warsaw Pact nation has produced or received any SLBMs in the last 10 years.

Weapons Production Summary Data

PART II

WEAPONS PRODUCTION SUMMARY DATA

This part includes five summary tables as follows:

- Summary Table 1a displays annual summary production "By" data on U.S., non-U.S. NATO, and total NATO compared to that of the Soviet Union, non-Soviet Warsaw Pact, and total Warsaw Pact for each of the 34 categories of weapons during the report period. Summary Table 1b displays annual summary production "For" data and is organized in the same manner as Table 1a.

- Summary Tables 2a and b display annual summary production "By" and "For" data separately for each category for the United States.

- Summary Tables 3a and b display annual summary production "By" and "For" data separately for each category for the non-U.S. NATO countries.

- Summary Tables 4a and b display annual summary production "By" and "For" data for each category for the Soviet Union.

- Summary Tables 5a and b dispiay annual summary production "By" and "For" data for each category for non-Soviet Warsaw Pact countries.

Summary Table 1a
NATO & Warsaw Pact
Production By Country/Alliance Listed

	Cumulative 1975–1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Main Battle Tanks											
US	4,630	850	390	1,100	1,200	1,100	980	760	950	780	720
Non–US NATO	2,850	225	525	600	725	650	525	425	125	150	175
NATO Total	7,480	1,075	915	1,700	1,925	1,750	1,505	1,185	1,075	930	895
USSR	13,200	2,500	2,500	3,000	2,600	2,900	3,000	3,300	3,500	3,500	1,700
Non–Soviet Warsaw Pact	4,125	800	625	600	500	800	825	725	850	650	450
Warsaw Pact Total	17,325	3,300	3,125	3,600	3,100	3,700	3,825	4,025	4,350	4,150	2,150
Light Tanks											
US	0	0	0	0	0	0	0	0	0	0	0
Non–US NATO	990	100	150	75	50	30	15	10	10	0	0
NATO Total	990	100	150	75	50	30	15	10	10	0	0
USSR	0	0	0	0	0	0	0	0	0	0	0
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	0	0	0	0	0	0	0	0	0	0	0
Armored Infantry Fighting Vehicles (AIFV)											
US	0	0	10	160	340	340	380	270	410	440	280
Non–US NATO	800	125	125	75	75	250	350	350	250	325	350
NATO Total	800	125	135	235	415	590	730	620	660	765	630
USSR	12,500	2,500	2,800	3,000	3,000	3,000	1,800	2,000	2,300	2,500	2,700
Non–Soviet Warsaw Pact	5,200	775	775	575	375	325	200	200	200	150	400
Warsaw Pact Total	17,700	3,275	3,575	3,575	3,375	3,325	2,000	2,200	2,500	2,650	3,100
Armored Personnel Carriers (APC)											
US	10,600	730	900	840	330	240	240	50	110	450	110
Non–US NATO	3,600	1,000	1,200	1,200	900	1,000	1,000	1,000	700	350	200
NATO Total	14,200	1,730	2,100	2,040	1,230	1,240	1,240	1,050	810	800	310
USSR	11,400	3,100	2,100	1,500	1,500	1,600	1,700	1,700	1,900	2,500	2,800
Non–Soviet Warsaw Pact	4,800	900	900	1,100	1,300	1,400	1,400	1,100	1,000	600	400
Warsaw Pact Total	16,200	4,000	3,000	2,600	2,800	3,000	3,100	2,800	2,900	3,100	3,200

Summary Table 1a (Continued)
NATO & Warsaw Pact
Production By Country/Alliance Listed

	Cumulative 1975–1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Other Armored Vehicles (OAV)											
US	200	1,300	280	540	400	520	400	750	500	390	510
Non–US NATO	2,925	475	375	125	150	525	200	175	225	200	125
NATO Total	3,125	1,775	655	665	550	1,045	600	925	725	590	635
USSR	8,000	2,000	2,000	2,100	2,200	1,900	1,700	1,400	1,000	1,000	1,000
Non–Soviet Warsaw Pact	30	35	35	35	35	35	40	75	40	40	40
Warsaw Pact Total	8,030	2,035	2,035	2,135	2,235	1,935	1,740	1,475	1,040	1,040	1,040
Field Artillery											
US	1,260	350	620	980	820	450	330	270	230	220	100
Non–US NATO	1,100	250	300	225	325	125	175	75	50	75	75
NATO Total	2,360	600	920	1,205	1,145	575	505	345	280	295	175
USSR	8,600	1,800	1,800	1,800	1,800	1,800	1,700	1,600	1,400	1,600	1,300
Non–Soviet Warsaw Pact	250	100	150	250	350	500	600	450	300	300	200
Warsaw Pact Total	8,850	1,900	1,950	2,050	2,150	2,300	2,300	2,050	1,700	1,900	1,500
Mortars											
US	170	160	0	10	90	70	110	410	0	0	0
Non–US NATO	1,550	325	350	225	225	225	150	575	100	25	5
NATO Total	1,720	485	350	235	315	295	260	985	100	25	5
USSR	225	25	25	25	50	50	100	100	300	300	500
Non–Soviet Warsaw Pact	0	10	10	35	35	45	45	25	25	125	125
Warsaw Pact Total	225	35	35	60	85	95	145	125	325	425	625
Multiple Rocket Launchers (MRL)											
US	0	0	0	20	50	80	80	60	50	50	50
Non–US NATO	0	0	0	0	5	10	5	5	5	5	5
NATO Total	0	0	0	20	65	90	85	65	55	55	55
USSR	3,400	700	600	600	600	600	450	500	450	500	300
Non–Soviet Warsaw Pact	800	125	150	175	175	175	175	175	175	50	40
Warsaw Pact Total	4,200	825	750	775	775	775	625	675	625	550	340

Summary Table 1a (Continued)
NATO & Warsaw Pact
Production By Country/Alliance Listed

	Cumulative 1975–1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Air Defense Guns/Cannons											
US	760	420	0	0	20	40	30	0	0	0	0
Non–US NATO	2,550	400	100	175	75	50	50	50	0	0	25
NATO Total	3,310	820	100	175	95	90	80	50	0	0	25
USSR	2,700	300	250	200	200	200	200	150	100	100	250
Non–Soviet Warsaw Pact	1,575	275	150	150	125	225	200	175	75	0	50
Warsaw Pact Total	4,275	575	400	350	325	425	400	325	175	100	300
Surface–to–Air Missiles (SAM & SSAM)											
US	18,200	3,400	1,100	920	1,700	1,500	2,500	2,000	2,400	3,000	3,600
Non–US NATO	15,500	4,500	5,500	5,700	7,200	5,500	4,700	7,000	5,500	5,500	5,500
NATO Total	33,700	7,900	6,600	6,620	8,900	7,000	7,200	9,000	7,900	8,500	9,100
USSR	96,000	15,000	15,000	14,000	15,000	15,000	17,000	17,000	16,000	15,000	14,000
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	96,000	15,000	15,000	14,000	15,000	15,000	17,000	17,000	16,000	15,000	14,000
Short–Range Ballistic Missiles (SRBM) And Free Rockets Over Ground (FROG)											
US	2,310	320	1	0	0	0	0	0	0	0	0
Non–US NATO	60	10	0	0	0	0	0	0	0	0	0
NATO Total	2,370	330	1	0	0	0	0	0	0	0	0
USSR	6,800	875	675	675	800	850	850	850	900	800	850
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	6,800	875	675	675	800	850	850	850	900	800	850
Attack Helicopters											
US	1,550	190	200	220	220	220	320	310	330	310	260
Non–US NATO	1,050	200	250	250	150	125	60	65	70	60	70
NATO Total	2,600	390	450	470	370	345	380	375	400	370	330
USSR	995	200	200	225	200	175	150	150	125	100	75
Non–Soviet Warsaw Pact	100	20	20	15	10	5	5	5	5	5	5
Warsaw Pact Total	1,095	220	220	240	210	180	155	155	130	105	80

Summary Table 1a (Continued)
NATO & Warsaw Pact
Production By Country/Alliance Listed

	Cumulative 1975–1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Other Military Helicopters											
US	0	0	5	5	80	50	80	35	30	25	25
Non–US NATO	1,275	275	250	100	125	100	100	150	100	100	125
NATO Total	1,275	275	255	105	205	150	180	185	130	125	150
USSR	2,325	325	350	350	375	375	350	350	325	300	275
Non–Soviet Warsaw Pact	700	175	175	150	200	150	150	150	125	100	20
Warsaw Pact Total	3,025	500	525	500	575	525	500	500	450	400	295
Fighter/Interceptor And Ground Attack Aircraft											
US	3,120	540	570	490	400	330	400	420	550	560	470
Non–US NATO	800	275	300	300	275	250	200	150	175	225	200
NATO Total	3,920	815	870	790	675	580	600	570	725	785	670
USSR	6,400	1,300	1,300	1,100	900	825	750	725	700	700	625
Non–Soviet Warsaw Pact	5	1	10	10	5	5	5	10	15	10	20
Warsaw Pact Total	6,405	1,301	1,310	1,110	905	830	755	735	715	710	645
Bomber Aircraft											
US	0	0	0	0	0	0	3	26	52	22	0
Non–US NATO	0	0	0	0	0	0	0	0	0	0	0
NATO Total	0	0	0	0	0	0	3	26	52	22	0
USSR	135	30	30	35	35	50	50	45	45	45	40
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	135	30	30	35	35	50	50	45	45	45	40
Tanker Aircraft											
US	14	0	6	6	11	10	10	14	7	6	2
Non–US NATO	0	0	0	0	0	0	0	0	0	0	0
NATO Total	14	0	6	6	11	10	10	14	7	6	2
USSR	0	0	0	0	1	1	5	5	5	5	10
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	0	0	0	0	1	1	5	5	5	5	10

Summary Table 1a (Continued)
NATO & Warsaw Pact
Production By Country/Alliance Listed

	Cumulative 1975–1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Reconnaissance/ECM Aircraft											
US	18	0	2	4	8	9	6	10	5	5	6
Non–US NATO	0	0	0	0	0	0	0	0	0	0	0
NATO Total	18	0	2	4	8	9	6	10	5	5	6
USSR	0	0	0	1	0	0	1	0	0	1	0
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	0	0	0	1	0	0	1	0	0	1	0
Airborne Warning And Control System (AWACS) Aircraft											
US	52	9	8	12	8	9	7	11	8	8	7
Non–US NATO	0	0	0	0	0	0	0	0	0	0	0
NATO Total	52	9	8	12	8	9	7	11	8	8	7
USSR	1	0	1	0	1	5	5	5	5	5	5
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	1	0	1	0	1	5	5	5	5	5	5
Combat–Capable Trainer Aircraft											
US	0	0	0	0	0	0	0	0	0	0	0
Non–US NATO	625	250	225	200	125	100	75	50	50	50	25
NATO Total	625	250	225	200	125	100	75	50	50	50	25
USSR	250	40	25	25	30	30	20	20	10	10	0
Non–Soviet Warsaw Pact	750	150	150	150	175	200	225	225	225	200	250
Warsaw Pact Total	1,000	190	175	175	205	230	245	245	235	210	250
Ballistic Missile Submarines											
US	0	0	1	1	1	2	1	2	0	1	1
Non–US NATO	1	1	0	0	0	0	1	0	0	0	0
NATO Total	1	1	1	1	1	2	2	2	0	1	1
USSR	21	2	2	1	1	2	2	1	2	1	2
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	21	2	2	1	1	2	2	1	2	1	2

Summary Table 1a (Continued)
NATO & Warsaw Pact
Production By Country/Alliance Listed

	Cumulative 1975–1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Attack Submarines											
US	11	0	7	4	4	5	3	2	2	2	5
Non–US NATO	16	3	2	2	3	3	1	3	4	4	1
NATO Total	27	3	9	6	7	8	4	5	6	6	6
USSR	32	11	9	7	8	6	6	6	7	7	7
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	32	11	9	7	8	6	6	6	7	7	7
Coastal Submarines											
US	0	0	0	0	0	0	0	0	0	0	0
Non–US NATO	17	2	4	1	1	4	1	0	0	1	2
NATO Total	17	2	4	1	1	4	1	0	0	1	2
USSR	0	0	0	0	0	0	0	0	0	0	0
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	0	0	0	0	0	0	0	0	0	0	0
Other Submarines											
US	0	0	0	0	0	0	0	0	0	0	0
Non–US NATO	0	0	0	0	0	0	0	0	0	0	0
NATO Total	0	0	0	0	0	0	0	0	0	0	0
USSR	3	0	0	0	1	1	0	1	0	1	0
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	3	0	0	0	1	1	0	1	0	1	0
Aircraft Carriers											
US	2	0	0	1	0	0	0	1	0	0	0
Non–US NATO	0	1	0	1	0	0	2	0	0	1	0
NATO Total	2	1	0	2	0	0	2	1	0	1	0
USSR	2	0	1	0	0	0	0	1	0	0	1
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	2	0	1	0	0	0	0	1	0	0	1

Summary Table 1a (Continued)
NATO & Warsaw Pact
Production By Country/Alliance Listed

	Cumulative 1975–1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Cruisers											
US	3	1	0	0	1	1	1	2	4	3	3
Non–US NATO	0	0	0	0	0	0	0	0	0	0	0
NATO Total	3	1	0	0	1	1	1	2	4	3	3
USSR	7	1	0	1	1	0	0	1	0	1	1
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	7	1	0	1	1	0	0	1	0	1	1
Destroyers											
US	25	5	3	1	1	0	0	0	0	0	0
Non–US NATO	12	1	2	4	0	1	3	1	1	1	0
NATO Total	37	6	5	5	1	1	3	1	1	1	0
USSR	1	2	2	1	4	2	4	3	3	3	3
Non–Soviet Warsaw Pact	0	0	0	0	0	0	1	0	0	0	0
Warsaw Pact Total	1	2	2	1	4	2	5	3	3	3	3
Frigates											
US	2	6	9	9	10	9	5	2	2	0	1
Non–US NATO	28	4	8	10	11	6	3	6	4	7	7
NATO Total	30	10	17	19	21	15	8	8	6	7	8
USSR	19	2	2	0	0	0	0	0	0	0	0
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	19	2	2	0	0	0	0	0	0	0	0
Smaller Frigates And Corvettes											
US	0	0	0	0	0	0	0	0	0	0	0
Non–US NATO	16	7	4	5	3	9	0	0	4	0	1
NATO Total	16	7	4	5	3	9	0	0	4	0	1
USSR	24	6	2	3	2	5	3	3	4	4	6
Non–Soviet Warsaw Pact	0	2	4	3	5	3	2	2	4	3	4
Warsaw Pact Total	24	8	6	6	7	8	5	5	8	7	10

Summary Table 1a (Continued)
NATO & Warsaw Pact
Production By Country/Alliance Listed

	Cumulative 1975–1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Amphibious Ships											
US	4	1	0	0	0	0	1	1	1	0	2
Non–US NATO	5	0	0	0	2	3	3	2	2	1	0
NATO Total	9	1	0	0	2	3	4	3	3	1	2
USSR	2	0	0	1	0	0	0	0	0	0	1
Non–Soviet Warsaw Pact	35	0	2	3	1	3	2	4	1	1	1
Warsaw Pact Total	37	0	2	4	1	3	2	4	1	1	2
Paramilitary Naval Vessels											
US	0	0	0	0	0	0	0	0	0	0	0
Non–US NATO	0	0	3	0	0	0	0	0	0	0	0
NATO Total	0	0	3	0	0	0	0	0	0	0	0
USSR	5	1	2	2	4	2	1	1	1	1	1
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	5	1	2	2	4	2	1	1	1	1	1
Intercontinental Ballistic Missiles (ICBM)											
US	223	0	0	0	0	0	0	12	24	12	9
Non–US NATO	0	0	0	0	0	0	0	0	0	0	0
NATO Total	223	0	0	0	0	0	0	12	24	12	9
USSR	1,200	200	175	125	125	75	100	75	125	150	140
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	1,200	200	175	125	125	75	100	75	125	150	140
Sea–Launched Ballistic Missiles (SLBM)											
US	129	109	74	91	77	74	73	3	0	0	21
Non–US NATO	75	10	5	5	5	10	10	10	10	10	10
NATO Total	204	119	79	96	82	84	83	13	10	10	31
USSR	1,000	200	225	200	100	40	55	75	100	100	100
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	1,000	200	225	200	100	40	55	75	100	100	100

Summary Table 1a (Continued)
NATO & Warsaw Pact
Production By Country/Alliance Listed

	Cumulative 1975–1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Intermediate And Medium Range Ballistic Missiles (IRBM/MRBM)											
US	0	0	0	0	15	72	60	76	55	0	0
Non–US NATO	25	5	5	5	2	2	2	2	2	2	2
NATO Total	25	5	5	5	17	74	62	78	57	2	2
USSR	350	100	125	125	125	125	100	25	50	40	0
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	350	100	125	125	125	125	100	25	50	40	0
Cruise Missiles											
US	810	490	470	790	990	970	770	1,100	820	650	610
Non–US NATO	2,000	400	400	450	450	500	450	600	475	450	500
NATO Total	2,810	890	870	1,240	1,440	1,470	1,220	1,700	1,295	1,100	1,110
USSR	6,800	1,300	1,310	1,325	1,275	1,350	1,500	1,600	1,600	1,800	2,000
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	6,800	1,300	1,310	1,325	1,275	1,350	1,500	1,600	1,600	1,800	2,000

Summary Table 1b
NATO & Warsaw Pact
Production For Forces of Country/Alliance Listed

	Cumulative 1975–1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Main Battle Tanks											
US	3,280	850	350	630	920	830	700	760	950	780	720
Non–US NATO	1,925	100	325	425	675	575	500	400	100	150	175
NATO Total	5,205	950	675	1,055	1,595	1,405	1,200	1,160	1,050	930	895
USSR	10,200	2,000	1,800	2,400	2,100	2,500	2,800	3,000	3,100	3,300	1,400
Non–Soviet Warsaw Pact	2,150	700	275	425	425	475	825	600	550	525	325
Warsaw Pact Total	12,350	2,700	2,075	2,825	2,525	2,975	3,625	3,600	3,650	3,825	1,725
Light Tanks											
US	0	0	0	0	0	0	0	0	0	0	0
Non–US NATO	140	0	0	0	0	0	0	20	0	0	0
NATO Total	140	0	0	0	0	0	0	20	0	0	0
USSR	0	0	0	0	0	0	0	0	0	0	0
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	0	0	0	0	0	0	0	0	0	0	0
Armored Infantry Fighting Vehicles (AIFV)											
US	0	0	10	160	340	340	380	270	410	440	280
Non–US NATO	325	50	125	100	75	225	350	350	250	350	350
NATO Total	325	50	135	260	415	565	730	620	660	790	630
USSR	11,600	2,400	2,200	2,000	2,100	2,200	1,200	1,600	1,600	1,900	2,000
Non–Soviet Warsaw Pact	1,875	250	250	400	250	225	50	70	125	25	125
Warsaw Pact Total	13,475	2,650	2,450	2,400	2,350	2,425	1,250	1,670	1,725	1,925	2,125
Armored Personnel Carriers (APC)											
US	2,730	0	0	0	10	370	460	200	240	530	30
Non–US NATO	2,525	675	950	650	450	300	675	550	525	350	175
NATO Total	5,255	675	950	650	460	670	1,135	750	765	880	205
USSR	9,000	3,400	2,500	2,000	2,200	2,600	2,800	2,300	2,500	2,900	3,000
Non–Soviet Warsaw Pact	4,275	375	225	175	125	50	125	225	125	125	250
Warsaw Pact Total	13,275	3,775	2,725	2,175	2,325	2,650	2,925	2,525	2,625	3,025	3,250

Summary Table 1b (Continued)
NATO & Warsaw Pact
Production For Forces of Country/Alliance Listed

	Cumulative 1975–1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Other Armored Vehicles (OAV)											
US	200	1,340	240	140	330	440	400	750	450	340	500
Non–US NATO	1,800	100	100	50	125	275	50	50	175	175	100
NATO Total	2,000	1,440	340	190	455	715	450	800	625	515	600
USSR	5,550	1,500	1,500	1,700	1,800	1,700	1,500	1,400	1,000	1,000	1,000
Non–Soviet Warsaw Pact	700	125	75	175	150	175	175	325	125	100	50
Warsaw Pact Total	6,250	1,625	1,575	1,875	1,950	1,875	1,675	1,725	1,125	1,100	1,050
Field Artillery											
US	260	240	460	680	380	270	200	240	110	70	170
Non–US NATO	700	150	100	100	50	75	50	25	25	25	25
NATO Total	960	390	560	780	430	345	250	265	135	95	195
USSR	5,125	1,200	1,200	1,300	1,300	1,200	1,300	1,200	1,300	1,300	1,200
Non–Soviet Warsaw Pact	515	75	125	325	300	325	375	425	350	300	175
Warsaw Pact Total	5,640	1,275	1,325	1,625	1,600	1,525	1,675	1,625	1,650	1,600	1,375
Mortars											
US	170	160	0	10	90	70	110	160	0	0	0
Non–US NATO	580	325	300	150	10	15	350	0	0	5	0
NATO Total	750	485	300	160	100	85	460	160	0	5	0
USSR	115	25	25	25	30	40	90	125	325	325	500
Non–Soviet Warsaw Pact	0	10	10	30	30	40	40	20	20	125	125
Warsaw Pact Total	115	35	35	55	60	80	130	145	345	450	625
Multiple Rocket Launchers (MRL)											
US	0	0	0	20	60	70	80	60	40	30	30
Non–US NATO	0	0	0	0	2	0	3	5	3	3	2
NATO Total	0	0	0	20	62	70	83	65	43	33	32
USSR	2,275	350	325	350	350	350	325	225	225	275	175
Non–Soviet Warsaw Pact	725	100	125	75	100	100	100	125	100	50	25
Warsaw Pact Total	3,000	450	450	425	450	450	425	350	325	325	200

Summary Table 1b (Continued)
NATO & Warsaw Pact
Production For Forces of Country/Alliance Listed

	Cumulative 1975–1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Air Defense Guns/Cannons											
US	40	0	0	0	0	40	30	0	0	0	0
Non–US NATO	2,825	500	100	275	50	70	50	5	0	5	10
NATO Total	2,865	500	100	275	50	110	80	5	0	5	10
USSR	1,275	50	50	50	50	55	60	90	50	90	275
Non–Soviet Warsaw Pact	850	175	100	125	100	175	200	200	100	25	50
Warsaw Pact Total	2,125	225	150	175	150	230	260	290	150	115	325
Surface–to–Air Missiles (SAM)											
US	6,700	3,100	900	900	1,400	1,300	2,700	2,300	2,600	3,200	2,700
Non–US NATO	12,300	3,300	4,300	4,600	5,600	4,500	3,600	4,400	3,400	3,300	3,300
NATO Total	19,000	6,400	5,200	5,500	7,000	5,800	6,300	6,700	6,000	6,500	6,000
USSR	67,700	11,200	11,400	10,500	10,900	9,900	12,900	13,900	13,900	13,900	12,200
Non–Soviet Warsaw Pact	6,250	675	700	975	550	1,450	1,500	675	500	300	30
Warsaw Pact Total	73,950	11,875	12,100	11,475	11,450	11,350	14,400	14,575	14,400	14,200	12,230
Short–Range Ballistic Missiles (SRBM) And Free Rockets Over Ground (FROG)											
US	1,300	210	0	0	0	0	0	0	0	0	0
Non–US NATO	1,040	90	0	0	0	0	0	0	10	0	0
NATO Total	2,340	300	0	0	0	0	0	0	10	0	0
USSR	5,050	625	425	350	475	400	475	475	475	375	475
Non–Soviet Warsaw Pact	970	10	75	550	125	175	350	35	125	100	0
Warsaw Pact Total	6,020	635	500	900	600	575	825	510	600	475	475
Attack Helicopters											
US	240	55	35	0	0	15	50	130	150	125	110
Non–US NATO	485	200	200	200	100	40	30	40	45	55	35
NATO Total	725	255	235	200	100	55	80	170	195	180	145
USSR	815	100	150	125	150	125	100	100	70	50	60
Non–Soviet Warsaw Pact	125	45	35	40	25	20	25	10	15	10	5
Warsaw Pact Total	940	145	185	165	175	145	125	110	85	60	65

Summary Table 1b (Continued)
NATO & Warsaw Pact
Production For Forces of Country/Alliance Listed

	Cumulative 1975–1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Other Military Helicopters											
US	0	70	140	160	220	150	220	140	165	145	130
Non–US NATO	480	100	70	50	65	35	30	50	30	50	60
NATO Total	480	170	210	210	285	185	250	190	195	195	190
USSR	2,250	325	325	325	325	300	250	325	300	275	200
Non–Soviet Warsaw Pact	210	55	35	20	35	45	65	70	70	70	5
Warsaw Pact Total	2,460	380	360	345	360	345	315	395	370	345	205
Fighter/Interceptor And Ground Attack Aircraft											
US	1,580	435	435	390	350	280	340	350	385	415	385
Non–US NATO	750	200	200	200	225	175	150	125	100	175	150
NATO Total	2,330	635	635	590	575	455	490	475	485	590	535
USSR	4,355	880	780	675	500	475	525	500	550	550	475
Non–Soviet Warsaw Pact	380	75	110	50	75	80	100	90	90	80	40
Warsaw Pact Total	4,735	955	890	725	575	555	625	590	640	630	515
Bomber Aircraft											
US	0	0	0	0	0	0	3	26	52	22	0
Non–US NATO	0	0	0	0	0	0	0	0	0	0	0
NATO Total	0	0	0	0	0	0	3	26	52	22	0
USSR	135	30	30	35	35	50	50	45	45	45	40
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	135	30	30	35	35	50	50	45	45	45	40
Tanker Aircraft											
US	14	0	6	6	11	10	10	14	7	6	2
Non–US NATO	0	0	0	0	0	0	0	0	0	0	0
NATO Total	14	0	6	6	11	10	10	14	7	6	2
USSR	0	0	0	0	1	2	5	5	6	6	8
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	0	0	0	0	1	2	5	5	6	6	8

Summary Table 1b (Continued)
NATO & Warsaw Pact
Production For Forces of Country/Alliance Listed

	Cumulative 1975–1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Reconnaissance/ECM Aircraft											
US	18	0	2	4	8	9	6	10	5	5	6
Non–US NATO	0	0	0	0	0	0	0	0	0	0	0
NATO Total	18	0	2	4	8	9	6	10	5	5	6
USSR	0	0	0	1	0	0	1	0	0	1	0
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	0	0	0	1	0	0	1	0	0	1	0
Airborne Warning And Control System (AWACS) Aircraft											
US	48	9	8	12	8	6	7	6	5	8	7
Non–US NATO	0	0	0	0	0	0	0	0	0	0	0
NATO Total	48	9	8	12	8	6	7	6	5	8	7
USSR	2	0	1	0	1	5	5	5	5	5	5
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	2	0	1	0	1	5	5	5	5	5	5
Combat–Capable Trainer Aircraft											
US	0	0	0	0	0	0	0	0	0	0	0
Non–US NATO	275	175	125	150	75	40	25	20	5	5	10
NATO Total	275	175	125	150	75	40	25	20	5	5	10
USSR	395	85	50	50	50	140	175	175	175	175	225
Non–Soviet Warsaw Pact	190	40	25	20	30	20	30	35	100	3	7
Warsaw Pact Total	585	125	75	70	80	160	205	210	275	178	232
Ballistic Missile Submarines											
US	0	0	1	1	1	2	1	2	0	1	1
Non–US NATO	1	1	0	0	0	0	1	0	0	0	0
NATO Total	1	1	1	1	1	2	2	2	0	1	1
USSR	21	2	2	1	1	2	2	1	2	1	2
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	21	2	2	1	1	2	2	1	2	1	2

Summary Table 1b (Continued)
NATO & Warsaw Pact
Production For Forces of Country/Alliance Listed

	Cumulative 1975–1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Attack Submarines											
US	11	0	6	4	5	5	4	2	2	3	2
Non–US NATO	8	2	2	2	3	3	1	1	3	3	1
NATO Total	19	2	8	6	8	8	5	3	5	6	3
USSR	27	10	8	6	7	5	4	3	4	5	6
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	2	0	0	0
Warsaw Pact Total	27	10	8	6	7	5	4	5	4	5	6
Coastal Submarines											
US	0	0	0	0	0	0	0	0	0	0	0
Non–US NATO	11	1	1	0	0	1	0	0	0	0	2
NATO Total	11	1	1	0	0	1	0	0	0	0	2
USSR	0	0	0	0	0	0	0	0	0	0	0
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	0	0	0	0	0	0	0	0	0	0	0
Other Submarines											
US	0	0	0	0	0	0	0	0	0	0	0
Non–US NATO	0	0	0	0	0	0	0	0	0	0	0
NATO Total	0	0	0	0	0	0	0	0	0	0	0
USSR	3	0	0	0	1	1	0	1	0	1	0
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	3	0	0	0	1	1	0	1	0	1	0
Aircraft Carriers											
US	2	0	0	1	0	0	0	1	0	0	0
Non–US NATO	0	1	0	1	0	0	2	0	0	1	0
NATO Total	2	1	0	2	0	0	2	1	0	1	0
USSR	2	0	1	0	0	0	0	1	0	0	1
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	2	0	1	0	0	0	0	1	0	0	1

Summary Table 1b (Continued)
NATO & Warsaw Pact
Production For Forces of Country/Alliance Listed

	Cumulative 1975–1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Cruisers											
US	4	1	0	0	1	1	1	2	4	3	3
Non–US NATO	4	0	0	0	0	0	0	0	0	0	0
NATO Total	8	1	0	0	1	1	1	2	4	3	3
USSR	7	1	0	1	1	0	0	1	0	1	1
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	7	1	0	1	1	0	0	1	0	1	1
Destroyers											
US	25	5	3	1	1	0	0	0	0	0	0
Non–US NATO	11	1	2	4	0	1	3	1	1	1	0
NATO Total	36	6	5	5	1	1	3	1	1	1	0
USSR	0	2	1	1	3	2	3	3	2	3	3
Non–Soviet Warsaw Pact	0	0	0	0	0	0	1	0	0	0	0
Warsaw Pact Total	0	2	1	1	3	2	4	3	2	3	3
Frigates											
US	2	5	8	9	9	8	5	2	2	0	1
Non–US NATO	18	3	4	8	8	5	1	4	4	6	4
NATO Total	20	8	12	17	17	13	6	6	6	6	5
USSR	19	2	2	0	0	0	0	0	0	0	0
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	19	2	2	0	0	0	0	0	0	0	0
Smaller Frigates And Corvettes											
US	0	0	0	0	0	0	0	0	0	0	0
Non–US NATO	13	5	3	5	1	2	0	0	4	0	1
NATO Total	13	5	3	5	1	2	0	0	4	0	1
USSR	18	4	1	2	1	3	2	3	5	9	9
Non–Soviet Warsaw Pact	2	2	4	3	5	3	3	0	1	0	0
Warsaw Pact Total	20	6	5	5	6	6	5	3	6	9	9

Summary Table 1b (Continued)
NATO & Warsaw Pact
Production For Forces of Country/Alliance Listed

	Cumulative 1975–1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Amphibious Ships											
US	4	1	0	0	0	0	1	1	1	1	3
Non–US NATO	0	0	0	0	2	0	0	1	2	1	0
NATO Total	4	1	0	0	2	0	1	2	3	2	3
USSR	13	0	2	3	2	1	2	2	1	1	2
Non–Soviet Warsaw Pact	12	0	0	0	0	0	0	0	0	0	1
Warsaw Pact Total	25	0	2	3	2	1	2	2	1	1	3
Paramilitary Naval Vessels											
US	0	0	0	0	0	0	0	0	0	0	0
Non–US NATO	0	0	3	0	0	0	0	0	0	0	0
NATO Total	0	0	3	0	0	0	0	0	0	0	0
USSR	5	1	2	2	4	2	1	1	1	1	1
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	5	1	2	2	4	2	1	1	1	1	1
Intercontinental Ballistic Missiles (ICBM)											
US	223	0	0	0	0	0	0	12	24	12	9
Non–US NATO	0	0	0	0	0	0	0	0	0	0	0
NATO Total	223	0	0	0	0	0	0	12	24	12	9
USSR	1,200	200	175	125	125	75	100	75	125	150	140
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	1,200	200	175	125	125	75	100	75	125	150	140
Sea–Launched Ballistic Missiles (SLBM)											
US	129	109	74	91	77	74	73	3	0	0	21
Non–US NATO	105	10	5	5	5	10	10	10	10	10	10
NATO Total	234	119	79	96	82	84	83	13	10	10	31
USSR	1,000	200	225	200	100	40	55	75	100	100	100
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	1,000	200	225	200	100	40	55	75	100	100	100

Summary Table 1b (Continued)
NATO & Warsaw Pact
Production For Forces of Country/Alliance Listed

	Cumulative 1975–1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Intermediate And Medium Range Ballistic Missiles (IRBM/MRBM)											
US	0	0	0	0	15	72	60	74	55	0	0
Non–US NATO	25	5	5	5	2	2	2	2	2	2	2
NATO Total	25	5	5	5	17	74	62	76	57	2	2
USSR	350	100	120	120	120	125	100	20	50	40	0
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	350	100	120	120	120	125	100	20	50	40	0
Cruise Missiles											
US	610	310	280	570	730	830	700	1,040	650	600	590
Non–US NATO	1,230	300	425	425	150	150	175	225	225	325	300
NATO Total	1,840	610	705	995	880	980	875	1,265	875	925	890
USSR	6,100	1,100	1,100	1,000	1,000	1,100	1,400	1,400	1,500	1,600	1,800
Non–Soviet Warsaw Pact	0	0	0	0	0	0	0	0	0	0	0
Warsaw Pact Total	6,100	1,100	1,100	1,000	1,000	1,100	1,400	1,400	1,500	1,600	1,800

Summary Table 2a
NATO
Production By the United States.

	Cumulative 1975–1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Main Battle Tanks	4,630	850	390	1,100	1,200	1,100	980	760	950	780	720
Light Tanks	0	0	0	0	0	0	0	0	0	0	0
Armored Infantry Fighting Vehicles (AIFV)	0	0	10	160	340	340	380	270	410	440	280
Armored Personnel Carriers (APC)	10,600	730	900	840	330	240	240	50	110	450	110
Other Armored Vehicles (OAV)	200	1,300	280	540	400	520	400	750	500	390	510
Field Artillery	1,260	350	620	980	820	450	330	270	230	220	100
Mortars	170	160	0	10	90	70	110	410	0	0	0
Multiple Rocket Launchers (MRL)	0	0	0	20	60	80	80	60	50	50	50
Air Defense Guns/Cannons	760	420	0	0	20	40	30	0	0	0	0
Surface–to–Air Missiles (SAM & SSAM)	18,200	3,400	1,100	920	1,700	1,500	2,500	2,000	2,400	3,000	3,600
Short–Range Ballistic Missiles (SRBM) And FROGS	2,310	320	1	0	0	0	0	0	0	0	0
Attack Helicopters	1,550	190	200	220	220	220	320	310	330	310	260
Other Military Helicopters	0	0	5	5	80	50	80	35	30	25	25
Fighter/Interceptor And Ground Attack Aircraft	3,120	540	570	490	400	330	400	420	550	560	470
Bomber Aircraft	0	0	0	0	0	0	3	26	52	22	0
Tanker Aircraft	14	0	6	6	11	10	10	14	7	6	2
Reconnaissance/ECM Aircraft	18	0	2	4	8	9	6	10	5	5	6
Airborne Warning And Control System (AWACS) Aircraft	52	9	8	12	8	9	7	11	8	8	7
Combat–Capable Trainer Aircraft	0	0	0	0	0	0	0	0	0	0	0
Ballistic Missile Submarines	0	0	1	1	1	2	1	2	0	1	1
Attack Submarines	11	0	7	4	4	5	3	2	2	2	5
Coastal Submarines	0	0	0	0	0	0	0	0	0	0	0
Other Submarines	0	0	0	0	0	0	0	0	0	0	0
Aircraft Carriers	2	0	0	1	0	0	0	1	0	0	0
Cruisers	3	1	0	0	1	1	1	2	4	3	3
Destroyers	25	5	3	1	1	0	0	0	0	0	0
Frigates	2	6	9	9	10	9	5	2	2	0	1
Smaller Frigates And Corvettes	0	0	0	0	0	0	0	0	0	0	0
Amphibious Ships	4	1	0	0	0	0	1	1	1	0	2
Paramilitary Naval Vessels	0	0	0	0	0	0	0	0	0	0	0
Intercontinental Ballistic Missiles (ICBM)	223	0	0	0	0	0	0	12	24	12	9
Sea–Launched Ballistic Missiles (SLBM)	129	109	74	91	77	74	73	3	0	0	21
Intermediate And Medium Range Ballistic Missiles	0	0	0	0	15	72	60	76	55	0	0
Cruise Missiles	810	490	470	790	990	970	770	1,100	820	650	610

Summary Table 2b
NATO
Production For Forces of the United States.

	Cumulative 1975–1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Main Battle Tanks	3,280	850	350	630	920	830	700	760	950	780	720
Light Tanks	0	0	0	0	0	0	0	0	0	0	0
Armored Infantry Fighting Vehicles (AIFV)	0	0	10	160	340	340	380	270	410	440	280
Armored Personnel Carriers (APC)	2,730	0	0	0	10	370	460	200	240	530	30
Other Armored Vehicles (OAV)	200	1,340	240	140	330	440	400	750	450	340	500
Field Artillery	260	240	460	680	380	270	200	240	110	70	170
Mortars	170	160	0	10	90	70	110	160	0	0	0
Multiple Rocket Launchers (MRL)	0	0	0	20	60	70	80	60	40	30	30
Air Defense Guns/Cannons	40	0	0	0	0	40	30	0	0	0	0
Surface–to–Air Missiles (SAM & SSAM)	6,700	3,100	900	900	1,400	1,300	2,700	2,300	2,600	3,200	2,700
Short–Range Ballistic Missiles (SRBM) And FROGS	1,300	210	0	0	0	0	0	0	0	0	0
Attack Helicopters	240	55	35	0	0	15	50	130	150	125	110
Other Military Helicopters	0	70	140	160	220	150	220	140	165	145	130
Fighter/Interceptor And Ground Attack Aircraft	1,580	435	435	390	350	280	340	350	385	415	385
Bomber Aircraft	0	0	0	0	0	0	3	26	52	22	0
Tanker Aircraft	14	0	6	6	11	10	10	14	7	6	2
Reconnaissance/ECM Aircraft	18	0	2	4	8	9	6	10	5	5	6
Airborne Warning And Control System (AWACS) Aircraft	48	9	8	12	8	6	7	6	5	8	7
Combat–Capable Trainer Aircraft	0	0	0	0	0	0	0	0	0	0	0
Ballistic Missile Submarines	0	0	1	1	1	2	1	2	0	1	1
Attack Submarines	11	0	6	4	5	5	4	2	2	3	2
Coastal Submarines	0	0	0	0	0	0	0	0	0	0	0
Other Submarines	0	0	0	0	0	0	0	0	0	0	0
Aircraft Carriers	2	0	0	1	0	0	0	1	0	0	0
Cruisers	4	1	0	0	1	1	1	2	4	3	3
Destroyers	25	5	3	1	1	0	0	0	0	0	0
Frigates	2	5	8	9	9	8	5	2	2	0	1
Smaller Frigates And Corvettes	0	0	0	0	0	0	0	0	0	0	0
Amphibious Ships	4	1	0	0	0	0	1	1	1	1	3
Paramilitary Naval Vessels	0	0	0	0	0	0	0	0	0	0	0
Intercontinental Ballistic Missiles (ICBM)	223	0	0	0	0	0	0	12	24	12	9
Sea–Launched Ballistic Missiles (SLBM)	129	109	74	91	77	74	73	3	0	0	21
Intermediate And Medium Range Ballistic Missiles	0	0	0	0	15	72	60	74	55	0	0
Cruise Missiles	610	310	280	570	730	830	700	1,040	650	600	590

Summary Table 3a
NATO
Production By Non–US NATO Countries.

	Cumulative 1975–1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Main Battle Tanks	2,850	225	525	600	725	650	525	425	125	150	175
Light Tanks	990	100	150	75	50	30	15	10	10	0	0
Armored Infantry Fighting Vehicles (AIFV)	800	125	125	75	75	250	350	350	250	325	350
Armored Personnel Carriers (APC)	3,600	1,000	1,200	1,200	900	1,000	1,000	1,000	700	350	200
Other Armored Vehicles (OAV)	2,925	475	375	125	150	525	200	175	225	200	125
Field Artillery	1,100	250	300	225	325	125	175	75	50	75	75
Mortars	1,550	325	350	225	225	225	150	575	100	25	5
Multiple Rocket Launchers (MRL)	0	0	0	0	5	10	5	5	5	5	5
Air Defense Guns/Cannons	2,550	400	100	175	75	50	50	50	0	0	25
Surface–to–Air Missiles (SAM & SSAM)	15,500	4,500	5,500	5,700	7,200	5,500	4,700	7,000	5,500	5,500	5,500
Short–Range Ballistic Missiles (SRBM) And FROGS	60	10	0	0	0	0	0	0	0	0	0
Attack Helicopters	1,050	200	250	250	150	125	60	65	70	60	70
Other Military Helicopters	1,275	275	250	100	125	100	100	150	100	100	125
Fighter/Interceptor And Ground Attack Aircraft	800	275	300	300	275	250	200	150	175	225	200
Bomber Aircraft	0	0	0	0	0	0	0	0	0	0	0
Tanker Aircraft	0	0	0	0	0	0	0	0	0	0	0
Reconnaissance/ECM Aircraft	0	0	0	0	0	0	0	0	0	0	0
Airborne Warning And Control System (AWACS) Aircraft	0	0	0	0	0	0	0	0	0	0	0
Combat–Capable Trainer Aircraft	625	250	225	200	125	100	75	50	50	50	25
Ballistic Missile Submarines	1	1	0	0	0	0	1	0	0	0	0
Attack Submarines	16	3	2	2	3	3	1	3	4	4	1
Coastal Submarines	17	2	4	1	1	4	1	0	0	1	2
Other Submarines	0	0	0	0	0	0	0	0	0	0	0
Aircraft Carriers	0	1	0	1	0	0	2	0	0	1	0
Cruisers	0	0	0	0	0	0	0	0	0	0	0
Destroyers	12	1	2	4	0	1	3	1	1	1	0
Frigates	28	4	8	10	11	6	3	6	4	7	7
Smaller Frigates And Corvettes	16	7	4	5	3	9	0	0	4	0	1
Amphibious Ships	5	0	0	0	2	3	3	2	2	1	0
Paramilitary Naval Vessels	0	0	3	0	0	0	0	0	0	0	0
Intercontinental Ballistic Missiles (ICBM)	0	0	0	0	0	0	0	0	0	0	0
Sea–Launched Ballistic Missiles (SLBM)	75	10	5	5	5	10	10	10	10	10	10
Intermediate And Medium Range Ballistic Missiles	25	5	5	5	2	2	2	2	2	2	2
Cruise Missiles	2,000	400	400	450	450	500	450	600	475	450	500

Summary Table 3b
NATO
Production For Forces of Non–US NATO Countries.

	Cumulative 1975–1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Main Battle Tanks	1,925	100	325	425	675	575	500	400	100	150	175
Light Tanks	140	0	0	0	0	0	0	20	0	0	0
Armored Infantry Fighting Vehicles (AIFV)	325	50	125	100	75	225	350	350	250	350	350
Armored Personnel Carriers (APC)	2,525	675	950	650	450	300	675	550	525	350	175
Other Armored Vehicles (OAV)	1,800	100	100	50	125	275	50	50	175	175	100
Field Artillery	700	150	100	100	50	75	50	25	25	25	25
Mortars	580	325	300	150	10	15	350	0	0	5	0
Multiple Rocket Launchers (MRL)	0	0	0	0	2	0	3	5	3	3	2
Air Defense Guns/Cannons	2,825	500	100	275	50	70	50	5	0	5	10
Surface–to–Air Missiles (SAM & SSAM)	12,300	3,300	4,300	4,600	5,600	4,500	3,600	4,400	3,400	3,300	3,300
Short–Range Ballistic Missiles (SRBM) And FROGS	1,040	90	0	0	0	0	0	0	10	0	0
Attack Helicopters	485	200	200	200	100	40	30	40	45	55	35
Other Military Helicopters	480	100	70	50	65	35	30	50	30	50	60
Fighter/Interceptor And Ground Attack Aircraft	750	200	200	200	225	175	150	125	100	175	150
Bomber Aircraft	0	0	0	0	0	0	0	0	0	0	0
Tanker Aircraft	0	0	0	0	0	0	0	0	0	0	0
Reconnaissance/ECM Aircraft	0	0	0	0	0	0	0	0	0	0	0
Airborne Warning And Control System (AWACS) Aircraft	0	0	0	0	0	0	0	0	0	0	0
Combat–Capable Trainer Aircraft	275	175	125	150	75	40	25	20	5	5	10
Ballistic Missile Submarines	1	1	0	0	0	0	1	0	0	0	0
Attack Submarines	8	2	2	2	3	3	1	1	3	3	1
Coastal Submarines	11	1	1	0	0	1	0	0	0	0	2
Other Submarines	0	0	0	0	0	0	0	0	0	0	0
Aircraft Carriers	0	1	0	1	0	0	2	0	0	1	0
Cruisers	4	0	0	0	0	0	0	0	0	0	0
Destroyers	11	1	2	4	0	1	3	1	1	1	0
Frigates	18	3	4	8	8	5	1	4	4	6	4
Smaller Frigates And Corvettes	13	5	3	5	1	2	0	0	4	0	1
Amphibious Ships	0	0	0	0	2	0	0	1	2	1	0
Paramilitary Naval Vessels	0	0	3	0	0	0	0	0	0	0	0
Intercontinental Ballistic Missiles (ICBM)	0	0	0	0	0	0	0	0	0	0	0
Sea–Launched Ballistic Missiles (SLBM)	105	10	5	5	5	10	10	10	10	10	10
Intermediate And Medium Range Ballistic Missiles	25	5	5	5	2	2	2	2	2	2	2
Cruise Missiles	1,230	300	425	425	150	150	175	225	225	325	300

Summary Table 4a
Warsaw Pact
Production By the Soviet Union.

	Cumulative 1975–1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Main Battle Tanks	13,200	2,500	2,500	3,000	2,600	2,900	3,000	3,300	3,500	3,500	1,700
Light Tanks	0	0	0	0	0	0	0	0	0	0	0
Armored Infantry Fighting Vehicles (AIFV)	12,500	2,500	2,800	3,000	3,000	3,000	1,800	2,000	2,300	2,500	2,700
Armored Personnel Carriers (APC)	11,400	3,100	2,100	1,500	1,500	1,600	1,700	1,700	1,900	2,500	2,800
Other Armored Vehicles (OAV)	8,000	2,000	2,000	2,100	2,200	1,900	1,700	1,400	1,000	1,000	1,000
Field Artillery	8,600	1,800	1,800	1,800	1,800	1,800	1,700	1,600	1,400	1,600	1,300
Mortars	225	25	25	25	50	50	100	100	300	300	500
Multiple Rocket Launchers (MRL)	3,400	700	600	600	600	600	450	500	450	500	300
Air Defense Guns/Cannons	2,700	300	250	200	200	200	200	150	100	100	250
Surface–to–Air Missiles (SAM & SSAM)	96,000	15,000	15,000	14,000	15,000	15,000	17,000	17,000	16,000	15,000	14,000
Short–Range Ballistic Missiles (SRBM) And FROGS	6,800	875	675	675	800	850	850	850	900	800	850
Attack Helicopters	995	200	200	225	200	175	150	150	125	100	75
Other Military Helicopters	2,325	325	350	350	375	375	350	350	325	300	275
Fighter/Interceptor And Ground Attack Aircraft	6,400	1,300	1,300	1,100	900	825	750	725	700	700	625
Bomber Aircraft	135	30	30	35	35	50	50	45	45	45	40
Tanker Aircraft	0	0	0	0	1	1	5	5	5	5	10
Reconnaissance/ECM Aircraft	0	0	0	1	0	0	1	0	0	1	0
Airborne Warning And Control System (AWACS) Aircraft	1	0	1	0	1	5	5	5	5	5	5
Combat–Capable Trainer Aircraft	250	40	25	25	30	30	20	20	10	10	0
Ballistic Missile Submarines	21	2	2	1	1	2	2	1	2	1	2
Attack Submarines	32	11	9	7	8	6	6	6	7	7	7
Coastal Submarines	0	0	0	0	0	0	0	0	0	0	0
Other Submarines	3	0	0	0	1	1	0	1	0	1	0
Aircraft Carriers	2	0	1	0	0	0	0	1	0	0	1
Cruisers	7	1	0	1	1	0	0	1	0	1	1
Destroyers	1	2	2	1	4	2	4	3	3	3	3
Frigates	19	2	2	0	0	0	0	0	0	0	0
Smaller Frigates And Corvettes	24	6	2	3	2	5	3	3	4	4	6
Amphibious Ships	2	0	0	1	0	0	0	0	0	0	1
Paramilitary Naval Vessels	5	1	2	2	4	2	1	1	1	1	1
Intercontinental Ballistic Missiles (ICBM)	1,200	200	175	125	125	75	100	75	125	150	140
Sea–Launched Ballistic Missiles (SLBM)	1,000	200	225	200	100	40	55	75	100	100	100
Intermediate And Medium Range Ballistic Missiles	350	100	125	125	125	125	100	25	50	40	0
Cruise Missiles	6,800	1,300	1,310	1,325	1,275	1,350	1,500	1,600	1,600	1,800	2,000

Summary Table 4b
Warsaw Pact
Production For Forces of the Soviet Union.

	Cumulative 1975–1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Main Battle Tanks	10,200	2,000	1,800	2,400	2,100	2,500	2,800	3,000	3,100	3,300	1,400
Light Tanks	0	0	0	0	0	0	0	0	0	0	0
Armored Infantry Fighting Vehicles (AIFV)	11,600	2,400	2,200	2,000	2,100	2,200	1,200	1,600	1,600	1,900	2,000
Armored Personnel Carriers (APC)	9,000	3,400	2,500	2,000	2,200	2,600	2,800	2,300	2,500	2,900	3,000
Other Armored Vehicles (OAV)	5,550	1,500	1,500	1,700	1,800	1,700	1,500	1,400	1,000	1,000	1,000
Field Artillery	5,125	1,200	1,200	1,300	1,300	1,200	1,300	1,200	1,300	1,300	1,200
Mortars	115	25	25	25	30	40	90	125	325	325	500
Multiple Rocket Launchers (MRL)	2,275	350	325	350	350	350	325	225	225	275	175
Air Defense Guns/Cannons	1,275	50	50	50	50	55	60	90	50	90	275
Surface–to–Air Missiles (SAM & SSAM)	67,700	11,200	11,400	10,500	10,900	9,900	12,900	13,900	13,900	13,900	12,200
Short–Range Ballistic Missiles (SRBM) And FROGS	5,050	625	425	350	475	400	475	475	475	375	475
Attack Helicopters	815	100	150	125	150	125	100	100	70	50	60
Other Military Helicopters	2,250	325	325	325	325	300	250	325	300	275	200
Fighter/Interceptor And Ground Attack Aircraft	4,355	880	780	675	500	475	525	500	550	550	475
Bomber Aircraft	135	30	30	35	35	50	50	45	45	45	40
Tanker Aircraft	0	0	0	0	1	2	5	5	6	6	8
Reconnaissance/ECM Aircraft	0	0	0	1	0	0	1	0	0	1	0
Airborne Warning And Control System (AWACS) Aircraft	2	0	1	0	1	5	5	5	5	5	5
Combat–Capable Trainer Aircraft	395	85	50	50	50	140	175	175	175	175	225
Ballistic Missile Submarines	21	2	2	1	1	2	2	1	2	1	2
Attack Submarines	27	10	8	6	7	5	4	3	4	5	6
Coastal Submarines	0	0	0	0	0	0	0	0	0	0	0
Other Submarines	3	0	0	0	1	1	0	1	0	1	0
Aircraft Carriers	2	0	1	0	0	0	0	1	0	0	1
Cruisers	7	1	0	1	1	0	0	1	0	1	1
Destroyers	0	2	1	1	3	2	3	3	2	3	3
Frigates	19	2	2	0	0	0	0	0	0	0	0
Smaller Frigates And Corvettes	18	4	1	2	1	3	2	3	5	9	9
Amphibious Ships	13	0	2	3	2	1	2	2	1	1	2
Paramilitary Naval Vessels	5	1	2	2	4	2	1	1	1	1	1
Intercontinental Ballistic Missiles (ICBM)	1,200	200	175	125	125	75	100	75	125	150	140
Sea–Launched Ballistic Missiles (SLBM)	1,000	200	225	200	100	40	55	75	100	100	100
Intermediate And Medium Range Ballistic Missiles	350	100	120	120	120	125	100	20	50	40	0
Cruise Missiles	6,100	1,100	1,100	1,000	1,000	1,100	1,400	1,400	1,500	1,600	1,800

Summary Table 5a
Warsaw Pact
Production By Non–Soviet Warsaw Pact Countries.

	Cumulative 1975–1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Main Battle Tanks	4,125	800	625	600	500	800	825	725	850	650	450
Light Tanks	0	0	0	0	0	0	0	0	0	0	0
Armored Infantry Fighting Vehicles (AIFV)	5,200	775	775	575	375	325	200	200	200	150	400
Armored Personnel Carriers (APC)	4,800	900	900	1,100	1,300	1,400	1,400	1,100	1,000	600	400
Other Armored Vehicles (OAV)	30	35	35	35	35	35	40	75	40	40	40
Field Artillery	250	100	150	250	350	500	600	450	300	300	200
Mortars	0	10	10	35	35	45	45	25	25	125	125
Multiple Rocket Launchers (MRL)	800	125	150	175	175	175	175	175	175	50	40
Air Defense Guns/Cannons	1,575	275	150	150	125	225	200	175	75	0	50
Surface–to–Air Missiles (SAM & SSAM)	0	0	0	0	0	0	0	0	0	0	0
Short–Range Ballistic Missiles (SRBM) And FROGS	0	0	0	0	0	0	0	0	0	0	0
Attack Helicopters	100	20	20	15	10	5	5	5	5	5	5
Other Military Helicopters	700	175	175	150	200	150	150	150	125	100	20
Fighter/Interceptor And Ground Attack Aircraft	5	1	10	10	5	5	5	10	15	10	20
Bomber Aircraft	0	0	0	0	0	0	0	0	0	0	0
Tanker Aircraft	0	0	0	0	0	0	0	0	0	0	0
Reconnaissance/ECM Aircraft	0	0	0	0	0	0	0	0	0	0	0
Airborne Warning And Control System (AWACS) Aircraft	0	0	0	0	0	0	0	0	0	0	0
Combat–Capable Trainer Aircraft	750	150	150	150	175	200	225	225	225	200	250
Ballistic Missile Submarines	0	0	0	0	0	0	0	0	0	0	0
Attack Submarines	0	0	0	0	0	0	0	0	0	0	0
Coastal Submarines	0	0	0	0	0	0	0	0	0	0	0
Other Submarines	0	0	0	0	0	0	0	0	0	0	0
Aircraft Carriers	0	0	0	0	0	0	0	0	0	0	0
Cruisers	0	0	0	0	0	0	0	0	0	0	0
Destroyers	0	0	0	0	0	0	1	0	0	0	0
Frigates	0	0	0	0	0	0	0	0	0	0	0
Smaller Frigates And Corvettes	0	2	4	3	5	3	2	2	4	3	4
Amphibious Ships	35	0	2	3	1	3	2	4	1	1	1
Paramilitary Naval Vessels	0	0	0	0	0	0	0	0	0	0	0
Intercontinental Ballistic Missiles (ICBM)	0	0	0	0	0	0	0	0	0	0	0
Sea–Launched Ballistic Missiles (SLBM)	0	0	0	0	0	0	0	0	0	0	0
Intermediate And Medium Range Ballistic Missiles	0	0	0	0	0	0	0	0	0	0	0
Cruise Missiles	0	0	0	0	0	0	0	0	0	0	0

Summary Table 5b
Warsaw Pact
Production For Forces of Non–Soviet Warsaw Pact Countries.

	Cumulative 1975–1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Main Battle Tanks	2,150	700	275	425	425	475	825	600	550	525	325
Light Tanks	0	0	0	0	0	0	0	0	0	0	0
Armored Infantry Fighting Vehicles (AIFV)	1,875	250	250	400	250	225	50	70	125	25	125
Armored Personnel Carriers (APC)	4,275	375	225	175	125	50	125	225	125	125	250
Other Armored Vehicles (OAV)	700	125	75	175	150	175	175	325	125	100	50
Field Artillery	515	75	125	325	300	325	375	425	350	300	175
Mortars	0	10	10	30	30	40	40	20	20	125	125
Multiple Rocket Launchers (MRL)	725	100	125	75	100	100	100	125	100	50	25
Air Defense Guns/Cannons	850	175	100	125	100	175	200	200	100	25	50
Surface–to–Air Missiles (SAM & SSAM)	6,250	575	700	975	550	1,450	1,500	675	500	300	30
Short–Range Ballistic Missiles (SRBM) And FROGS	970	10	75	550	125	175	350	35	125	100	0
Attack Helicopters	125	45	35	40	25	20	25	10	15	10	5
Other Military Helicopters	210	55	35	20	35	45	65	70	70	70	5
Fighter/Interceptor And Ground Attack Aircraft	380	75	110	50	75	80	100	90	90	80	40
Bomber Aircraft	0	0	0	0	0	0	0	0	0	0	0
Tanker Aircraft	0	0	0	0	0	0	0	0	0	0	0
Reconnaissance/ECM Aircraft	0	0	0	0	0	0	0	0	0	0	0
Airborne Warning And Control System (AWACS) Aircraft	0	0	0	0	0	0	0	0	0	0	0
Combat–Capable Trainer Aircraft	190	40	25	20	30	20	30	35	100	3	7
Ballistic Missile Submarines	0	0	0	0	0	0	0	0	0	0	0
Attack Submarines	0	0	0	0	0	0	0	2	0	0	0
Coastal Submarines	0	0	0	0	0	0	0	0	0	0	0
Other Submarines	0	0	0	0	0	0	0	0	0	0	0
Aircraft Carriers	0	0	0	0	0	0	0	0	0	0	0
Cruisers	0	0	0	0	0	0	0	0	0	0	0
Destroyers	0	0	0	0	0	0	1	0	0	0	0
Frigates	0	0	0	0	0	0	0	0	0	0	0
Smaller Frigates And Corvettes	2	2	4	3	5	3	3	0	1	0	0
Amphibious Ships	12	0	0	0	0	0	0	0	0	0	1
Paramilitary Naval Vessels	0	0	0	0	0	0	0	0	0	0	0
Intercontinental Ballistic Missiles (ICBM)	0	0	0	0	0	0	0	0	0	0	0
Sea–Launched Ballistic Missiles (SLBM)	0	0	0	0	0	0	0	0	0	0	0
Intermediate And Medium Range Ballistic Missiles	0	0	0	0	0	0	0	0	0	0	0
Cruise Missiles	0	0	0	0	0	0	0	0	0	0	0

Weapons Production Category Definitions

APPENDIX

WEAPONS PRODUCTION CATEGORY DEFINITIONS

This section contains definitions of the 34 weapon systems categories used in this report.

Category 1. Main Battle Tanks. All armored, all-tracked combat vehicles weighing at least 26 metric tons with a direct-fire main gun of at least 90mm in caliber mounted in a rotatable turret.

Category 2. Light Tanks. All tanks that do not include all of the characteristics of a main battle tank, but have a gun of over 70mm and below 90mm.

Category 3. Armored Infantry Fighting Vehicles (AIFV). All lightly armored wheeled or tracked infantry fighting vehicles that are armed with a cannon of at least 20 mm in caliber and provide the capability for troops to fight under armor protection. They may often be equipped with an anti-tank guided missile (ATGM) launcher.

Category 4. Armored Personnel Carriers (APC). All lightly armored wheeled or tracked personnel carriers used primarily to carry combat troops and normally armed with a cannon or a machine gun permanently mounted on the vehicle.

Category 5. Other Armored Vehicles (OAV). All other armored vehicles, including armored command vehicles, armored reconnaissance vehicles, and armored vehicles equipped with ATGM launchers.

Category 6. Field Artillery. All primarily indirect-fire weapon systems with a caliber size equal to or exceeding 100mm. Guns and howitzers are included.

Category 7. Mortars. All crew-served tube weapons designed to fire at a high angle (45 to 80 degrees). Included in this category are all towed, truck-transported, and self-propelled mortars with a caliber of at least 100mm.

Category 8. Multiple Rocket Launchers (MRL). All multiple rocket launchers with a caliber of at least 100mm. These launchers can fire singly or in multiple salvos.

Category 9. Air Defense Guns/Cannon. All towed or self-propelled guns with a caliber of at least 20mm and designed for engaging aerial targets. Counting unit is the platform on which the gun is mounted.

Category 10. Surface-to-Air Missiles (SAM and SSAM). All land-based and sea-based crew-served surface-to-air missiles.

WEAPONS PRODUCTION CATEGORY DEFINITIONS
(Continued)

Category 11. Short-Range Ballistic Missiles (SRBM) and Free Rockets Over Ground (FROG). All individually fired surface-to-surface rockets or ballistic missiles that are either free-flight or inertially guided with a maximum operational range equal to or less than 1,000 kilometers.

Category 12. Attack Helicopters. All rotary-wing aircraft designed to employ permanently mounted air-to-air or air-to-ground ordnance such as missiles, guns, cannons, rockets, bombs, or other weapons that are fired under control of the pilot or co-pilot. They are normally armed with ATGM launchers.

Category 13. Other Military Helicopters. All rotary-wing aircraft not inlcuded in the Attack Helicopters category.

Category 14. Fighter/Interceptor and Ground Attack Aircraft. All fixed-wing aircraft having a maximum gross take-off weight of less than 60,000 kilograms designed with the roles of intercepting and destroying hostile aircraft or of attacking surface targets.

Category 15. Bomber Aircraft. All fixed-wing aircraft having a maximum gross take-off weight of 60,000 kilograms or more with a primary surface attack mission.

Category 16. Tanker Aircraft. All fixed-wing aircraft that are designed exclusively to provide in-flight refueling.

Category 17. Reconnaissance/ECM Aircraft. All fixed-wing manned aircraft designed with a primary mission of reconnaissance/data collection or offensive/defensive electronic support.

Category 18. Airborne Warning and Control System (AWACS) Aircraft. All fixed-wing aircraft designed solely to perform the AWACS function.

Category 19. Combat-Capable Trainer Aircraft. All fixed-wing combat aircraft designed and equipped for training pilots or other crew members.

Category 20. Ballistic Missile Submarines. All submarines capable of launching ballistic missiles.

Category 21. Attack Submarines. All combatant submarines that have as their main armament cruise missiles, torpedoes and/or torpedo-tube-launched missiles, or other weapons. Normally more than 1,400 metric tons submerged.

WEAPONS PRODUCTION CATEGORY DEFINITIONS
(Continued)

Category 22. Coastal Submarines. All combatant submarines designed primarily for coastal defense tasks and whose design restricts them to short-endurance operations. Normally less than 1,400 metric tons submerged.

Category 23. Other Submarines. All other submarines used mainly in a non-combatant command, control, and communications (C-3) role.

Category 24. Aircraft Carriers. All aircraft carriers, other than amphibious assault ships, that are equipped to operate conventional take-off and landing (CTOL) aircraft and/or vertical/short take-off and landing (V/STOL) aircraft.

Category 25. Cruisers. All larger surface combatants usually displacing between 5,000 and 30,000 metric tons (full load). Other than battleships, these are the largest and most extensively armed surface warships.

Category 26. Destroyers. All larger surface combatants other than battleships and cruisers capable of independent operations on the open ocean. Usually smaller and with less powerful armament or less endurance than a cruiser. May function in a variety of roles, including battle group support, convoy escort, and shore bombardment. Capable of providing anti-submarine, anti-ship, and anti-air protection to other deployed forces. Lacks the command, control, communications, or electronic warfare capabilities of cruisers. Destroyers are general-purpose units as distinct from frigates, which emphasize one primary role in design and function.

Category 27. Frigates. All larger surface combatants that emphasize one primary role in design and function, usually displacing at least 2,000 metric tons (full load), and having a sustained speed of over 20 knots.

Category 28. Smaller Frigates and Corvettes. All smaller surface combatants usually displacing less than 2,000 but more than 700 metric tons (full load) and without the sustained endurance of frigates, but capable of operating at sustained speeds greater than 20 knots. Primarily designed to operate in coastal waters.

Category 29. Amphibious Ships. All amphibious assault ships, larger amphibious warfare ships, and smaller amphibious warfare ships that are designed to support and execute amphibious operations. May carry landing craft and/or amphibious vehicles, launching them via a wet well. May operate V/STOL aircraft for use in direct support of assault operations. Does not include landing craft.

WEAPONS PRODUCTION CATEGORY DEFINITIONS
(Continued)

Category 30. Paramilitary Naval Vessels. All vessels employed by paramilitary forces, such as the Coast Guard and the KGB, that possess a combat capability. Counted in this category are paramilitary combatant vessels that are equivalent to larger principal surface combatants, smaller frigates and corvettes, and ASW/ASUW patrol combatants. To be included in this category, a paramilitary patrol combatant (WPG) or patrol ship (WPGF) must be armed with surface-to-surface missiles and/or torpedoes. No paramilitary vessels less capable than a patrol ship (WPGF) as defined above are included.

Category 31. Intercontinental Ballistic Missiles (ICBM). All land-based missiles that follow a ballistic trajectory over most of their flight path and that have a range of more than 5,500 kilometers.

Category 32. Sea-Launched Ballistic Missiles (SLBM). All missiles that follow a ballistic trajectory over most of their flight path and that are launched from surface or sub-surface vessels.

Category 33. Intermediate and Medium-Range Ballistic Missiles. All land-based missiles that follow a ballistic trajectory over most of their flight path and that have a range of more than 1,000 kilometers and less than or equal to 5,500 kilometers.

Category 34. Cruise Missiles. All ground-, sea-, and air-launched missiles that operate entirely within the earth's atmosphere and maintain thrust throughout their flight. Characterized by the presence of air-foils to sustain lift during flight.

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